

Letters from the East and from the West. By Frederick Hall.

LETTERS FROM THE EAST AND FROM THE WEST.

BY FREDERICK HALL, M.D.

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TO THE PUBLIC

Dear-Friend: —Being about to send you a Book, it is deemed very important to say a word to you about it, in the manner of a *Preface* , and this maybe all, which you will wish to read. The work is *small* , and this circumstance, being in the present age, accounted a high recommendation, may procure for it a limited persual.

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The “Letters from the East, or from the valley of the Connecticut river,” were first published in National Inteltigencer of this city. These letters, it was reported, a few individuals, of your large family, would be glad to preserve, provided they were in the form of book. For their gratification, they are now reprinted in the desired shape.

The history of the “Letters from the West” is brief. They were written more than years ago, and transmitted; by mail, to the writer's wife, to cheer her loneliness. He cannot say, that they were composed for her amusement, only. It was his design to spend a part of the following winter in re-writing, and preparing them for the type. Sickness confined him, the whole of that dreary winter, to his couch. His health kind Heaven, in the spring, restored, and he set himself to the work of transcription. When the business was completed, the manuscript was offered, for sale, to three or four publishers, but they would not buy it. “We are willing,” said they, “to print it, at our own risk. But the world is full of books; none sell, except novels; the taste of the age is so dainty, it will accept of nothing, which is not strongly peppered; times are hard; money is scarce, and we cannot run the hazard of buying a work of travels.” The author, like every tender hearted father, fancying his offspring too good to give away, concluded to lock up the scroll in his scrutoir, where it has had a long sleep.

When the other Letters come to be printed, it was found that they formed a bulk, too diminutive for a bound volume. What was to be done? After mature cogitation, it was resolved, to enlarge the volume, by the addition a few of the “Letters from the West.” Now, as an elephant flings out his proboscis to learn, if there is any thing for him to eat or VI drink, so these letters are thrown out to ascertain, whether you, friend, have any mental appetite for such food. Should they suit your taste, five chances to one, another parcel of the same series, relating to the *farther west*, will follow these. But the author expects no such thing. The balance of the manuscript is rolled up, and packed away, in a tin box, there to remain incog—how long? forever? Perhaps not. Who can say, that it will not be read and lauded, a thousand lustrums hence? Who knows but the hidden fires

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of Vesuvius, or Mouna Kea, or Cotopaxi, are, at this moment, forming a subterranean passage to our “Federal City?” Who knows but “Capitol Hill” will, one day, become the crater of a physical, instead of a political volcano, and that the very spot, on which the Temple of Legislation now rears its bold and beautiful front, will send forth torrents of molten rock, to deluge the city, and even the “White House,” mountain high, with floods of red hot lava? Who knows but Washington, the “city of magnificent distances,” will be a desolation, a literal “mer de glace,” a seat of solitude, a place of owls and snakes, through the long period of a Platonic year, or twenty-five thousand of our puny years? Who knows but some future vine dresser, or, more probably, some Maryland tobacco grower, will, while sinking a well in the solid lava, strike on one of the splendid pillars of breccia marble, which now adorn the chamber of confusion, or on the bust of Marshall or Madison?

The marvelous incident will be announced. The report flies on the wings of the wind, “that the ancient, long lost city of Washington has been discovered.” The nations, which will then be, will all be agog to learn what works of art, what historic lore, what riches lie here entombed. The literati, and the artists, from beyond the Rocky mountains will be here. Legislators from the new Republics of Kamtschatka and Patagonia will be here, in quest of wisdom from the records of their long extinct sister. Hither will come a balloon, driven by lightning, from the Sandwich Islands, and another from the refined city of Tombuctoo, filled with swarthy virtuosos, and with money-seekers, eager to lay hands on the “forty millions in the vaults of the Treasury,” an account of which they will have read in ancient history.

Some future Napoleon sets his troops to the work of excavation. All eyes watch their operations. Every object thrown out is closely examined. Numberless articles, which produce staring are disclosed. A pick-axe strikes the black statue, of Jefferson. It is carried off, and converted to its proper V use—into kitchen stoves. Next come forth the portraits of Washington and La Fayette, uninjured and bright, not having even the smell of fire. They are carefully preserved for other generations to gaze at, and admire, and worship, as demigods. A crow-bar sinks into a chamber of documents, which are so crisped, and yielding, that it goes through them, and falls into the room below, breaking many brandy

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bottles. The excavators now commence laying open the broad Pennsylvania avenue, where they find a motley mass of dead bodies, long strings of hackney coaches, pastry-shops, whose shelves are covered with charred cakes—older than the loaf from Pompeii, now in the Museo Barbonico at Naples—billiard tables, champagne bottles, ten-pin-alleys, card-rooms, &c. &c. all revelators of the doings of other days. At length the workmen reach the Treasury Building, furnished with long rakes, with which they expect to draw out of the dark vault, bushels of dollars and eagles. An opening is made. A rake is let down. It scrapes, and scrapes, and scrapes, but nothing rattles. The wider, wearied and vexed, draws out the instrument, and finds on one of its teeth a mouldy bundle of Treasury notes, without signature.

The diggers next turn their attention to other streets, and at length, in the drawer of a case of minerals in C street, they come across the little round tin box. It is opened. Its contents are taken out, and handled with all the caution, with which an Italian antiquary unrolls a papyrus manuscript. The work is every where announced, in glaring capitals, *Letters from the West*. The whole world reads it with devouring avidity, and extols it to the stars. It is copied and placed in every library in the land, as one of the best records of the men and deeds of old times. And who knows, but all this will yet be real, bone-fide history? Who knows, but the author himself will be present, an eye and ear-witness of this rather posthumous renown. Now, friend, will not this be “glory enough?” Exulting in the full anticipation of it all, he bids you a long farewell.

Washington, April 24, 1840.

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ERATTA.

Page 122, 15th line from the bottom, for *I* read *J*.

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LETTERS FROM THE VALLEY OF THE CONNECTICUT RIVER, ON MINERALS SCENERY &c.

LETTER I.

Haddam. (Conn.) July 24, 1838.

I took passage at New York, yesterday, in a steamboat bound for Hartford. For a conveyance from one of these cities to the other, by steam power, I have, many times,

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paid five dollars. Now the demand was *fifty cents!* The distance is, I believe, about one hundred and forty miles.

I could not pass by Haddam—a place known all over the civilized earth, for the richness and variety of its mineral productions. I therefore begged the captain to put me on shore, that I might have the pleasure of spending a few days in rambling among the rocks, and examining the fine quarries of granite and gneiss, which are very numerous, and are said to be extremely lucrative to their proprietors. The barren hills are, indeed, alive with human beings, hard at work, with the wedge, the crowbar, the drill, and the sledge-hammer. Thousands of tons of the stone are already got out, and prepared for the builder's hand, waiting to be transported to New York, and other more Southern markets.

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To-day I have been to visit the locality of *Iolite*, situated on what is here termed “Tim's Hill,” about a mile north from the meeting house. This beautiful gem is unequally distributed in an immense mass of imperfect granite, constituted of all the ingredients requisite to form good granite, but badly mixed. The quartz, which is white, exists in too small proportion. The feldspar is abundant and interesting, being principally of that variety called albite, (from the Latin *albus* , white.) I found, also, in different parts of the rock, fine specimens of *adularia*—a name derived from one of the Alps, in Switzerland, once known by the name of *Adula* , but which is now called Stella, where it was first discovered. The mica is jet black, some of it a little inclining to green. These articles, quartz, feldspar, and mica, are, you are aware, all that is necessary to constitute granite; which is often, the repository of many other minerals. Among these foreign substances are, in the present instance, the *Iolite* and *Schorl* , the latter scattered with a liberal hand, and in perfect crystals, terminated at each end by three faces. The prisms sometimes have three, sometimes six, and sometimes nine lateral faces, moderately striated. These crystals are usually short and small; most of them less than an inch in length, and some smaller than a pea; but

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generally about the size of a hickory nut. They are very beautiful, and so abundant, that I obtained a quart of them in half an hour.

The Iolite is procured by blasting the rock. There had been so much of it torn to pieces by the force of powder, and so many large fragments were left unbroken by the hammers of other mineralogists, that I did not deem it expedient to repeat the operation. Aided by two individuals, who were accustomed to work among the rocks, I was enabled, by means of the hammer and chisel, to obtain a number of good specimens. The crystals, however, were none of them complete. The name, formed from the Greek *ion* , violet, and *lithos* , a stone, does not, in my apprehension convey to the mind a full and accurate idea of its color. It exhibits, it is true, a tinge of the violet, but several other colors, and particularly the green, have lent their aid in making up the compound presented. The lustre which it displays, when viewed in certain positions, is very peculiar, and cannot easily be described.: An individual who has once seen the stone will, ever after, be able to recognize it.

Haddam furnishes beryl of an excellent quality, in most of its granite. quarries, and particularly at those on Long Hill. and at one on the eastern side of the river. From the quarry last mentioned, I have just procured two of the finest crystals I ever had in my possession. One of them is a perfect hexagonal prism, about two inches long, and an inch and a half in diameter. The faces forming its terminations are at right angles with the sides, and wear as fine a polish as the hand of Nature can produce. The color is a brilliant emerald green, and, indeed, the crystal appears to possess more of the characters of the emerald, than of the beryl. I may write to you again to-morrow, if I feel in the humor for it, after hard working.

LETTER II.

Haddam, July 25, 1838.

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I had engaged two of the quarry men to work for me to-day at the famous chrysoberyl locality. They were on the spot with their blasting apparatus at an early hour. The rock to be operated on is situated four or five rods east from the meeting-house, and is owned by a Mr. Brainard, whose house rests on a part of it. Blasting has, in former times, been executed with success in the cellar, where small particles of the chrysoberyl may now, by close inspection, be discovered in the rock. Most of the digging and blasting, however, has been effected on the north side of the house, and within three or four feet from it. Here, directly under the windows, I purchased the privilege of making an experiment on the following conditions: I was to pay the owner five dollars for a single blast, and to satisfy him for any damage which might be done to the building. The preliminaries being settled, the 4 men set themselves, with good heart, to the work of boring; the one holding the drill, and the other plying the massy hammer.

The rock to be penetrated is a sort of granite. Professor Shepard calls it *talcy* granite. It might as well be named *albitic* granite, for nearly all the feldspar belongs to the variety called *albite*. The mode of operating is this: the orifice is sunk to the depth of twelve or fourteen inches; about a pound and a half of powder is poured in and confined in the ordinary manner; planks are placed before the lower windows; the upper ones are taken out; poles are brought and laid over the digging, to diminish the force of the rising fragments; all is ready; the train is laid; the family seem fearless; but I acknowledge myself a coward, and have no liking for the smell of gunpowder; I retire into the cornfield; away goes the charge; the solid granite is shattered; the explosion was a heavy one; the fragments flew in all directions; a mass, weighing, perhaps, a quarter of a ton, was thrown completely over the house, and lodged a rod or two beyond it, and yet no injury was sustained by the edifice, except the fracturing of a few panes of glass.

The experiment proved to be a fortunate one. And here permit me to remark, that this singular deposite of mongrel granite gives lodgment, I hesitate not to affirm, to a greater number of *strangers* and *foreigners* than any other rock in the United States. In it have

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been found not only the chrysoberyl, but talc, bismuthine, zircon, beryl, columbite, garnet, pinite, automolite, and I know not how many others. Good samples of most of these substances, I had the fortune to obtain. The chrysoberyl, however, was the mineral which I was most solicitous to procure, and my exertions were crowned with a good degree of success. It occurs massive; also in hexagonal prisms, and hexagonal tables. The color is olive green, sometimes slightly approaching to yellow. It ranks among the hardest of the gems. It is translucent, and some of the thinnest and purest specimens are semi-transparent. I have done with Haddam.

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LETTER III.

Middletown, (Conn.) July, 26, 1838.

On my way from Haddam, and' about three miles before. I reached this city, I came to the *China stone quarry*, so called, I suppose, on account of the feldspar it furnishes, having been employed, at New York and abroad, in the manufacture of china or porcelain ware. This quarry has, within a few years become much celebrated, in consequence of its being the repository of a number of rare and interesting minerals. It is situated on land a little elevated above the road, and but a rod or two distant from it on the eastern side. The rock is of a very peculiar character. I was struck by its appearance. It is granite, but composed principally of feldspar and mica; not minutely divided and intimately blended together as in common granite, but almost entirely separate, the one from the other, each presenting itself in distinct, parcels or nests, and in a state of unusual purity.

The mica is of a greenish brown color, and occurs both in crystals and in irregular masses. I obtained two specimens in regular six-sided tables, a form which, according to my observation, is of rather rare occurrence. Their surfaces exhibit a splendid polish, and are somewhat iridescent. An oblique angled prismatic crystal which I found here, and shall have the pleasure of showing to you, has one of its acute angles truncated. Mica, you, know,

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is always foliated, and its folia are easily reducible by a knife or other sharp instrument, to a degree of tenuity almost inconceivable. I procured plates in this quarry of a large size, several of them measuring ten inches each in length, and seven or eight in width. It might be, and, I believe, has been, wrought to some extent as an article of commerce. It is used, you are aware, in the place of glass in stoves, in lanterns, and by the Russians in ships of war.

But the pecuniary value of this quarry is derived chiefly from its feldspar. This substance constitutes the major part of the deposit. It is of a milky white color, and occurs under several 6 different forms. The crystals found here are of wonderful magnitude. Professor Shepard says, "imperfect crystals of the *sex-decimal* figure exist here one foot in length, and six or eight inches in thickness." With my hammer and chisel I removed from the rock a number of crystals, some of which were nearly or quite perfect, but none of them of the enormous size above mentioned.

The feldspar is quarried with great facility. Much of the rock lies above the surface. Little or no digging is yet required. Masses of it are obtained, weighing many hundred pounds, entirely free from quartz or mica. Such cases, however, are, it is believed, of unfrequent occurrence. It is seldom found in large sections wholly unmixed with one or the other, or both of its sister substances, mica or feldspar. The fragments when dislodged from the rock by the force of gunpowder or by other means, are broken into pieces of the size of a man's fist or smaller, and the feldspar carefully separated from the other substances, with which it may be connected, and thrown into a heap by itself. It is now fit for the market. "Seven hundred tons were conveyed to Middletown the year before last, of which six hundred were shipped to Liverpool, and one hundred to the porcelain factory at Jersey City, near New York."—(*Prof. Shepard's report.*) The material exists in this locality in vast abundance—enough to supply any demand for the article which our own country, or even Europe, will make for centuries to come.

What you will ask, is the particular use to which this feldspar is applied? Is it made to form a part of the *body* of the porcelain ware, or is it employed in its glazing or enamel? The latter only. It is, in fact, the *petunze* of the Chinese. The body of the china or porcelain ware is formed of kaolin or porcelain clay, which, it is now universally acknowledged, is produced by the decomposition of *graphic granité*, a substance composed of quartz and feldspar. I have witnessed the process by which this clay (brought from the vicinity of Limoges) is converted at the famous porcelain manufactory of Sevres, in France, into superb vases and other elegant articles. But I have no time, at present, to describe it, nor would you have, to read the description. It is enough to say, that when, the vessel made of porcelain clay, has received from the wheel or the potter's hand its proper form, it is placed in an oven and partially baked. It is thus brought into what is called its *biscuit* state—white nearly as snow, porous, destitute of beauty, and easily destructible. Here the feldspar comes in play. It is reduced to a fine powder, made into a paste of about the thickness of cream, and applied to the *biscuit* ware, which now undergoes an additional baking. The paste, formed principally of feldspar, is completely fused, fills up the pores, rendering the vessel impermeable to water, and imparting to it a degree of beauty and durability of which no other species of pottery can boast. I have now told you the use of the porcelain earth, and also of the Middletown feldspar. I said too, that other interesting minerals exist in this quarry.

I found several perfect crystals of albite, and some of them nearly transparent. This substance differs from feldspar in only one respect: it contains *soda* instead of *potash*. It occurs here not only in crystals, but also massive and granular. In no other locality in this country, have I met with it in its crystalized state.

Apatite, which is a variety of the phosphate of lime, exists in short regular hexaedral prisms in various parts of this china stone quarry. The colors are quite different in different specimens; some a bluish white, some a pale red, and others asparagus green. I procured a number of very pretty samples.

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Zircon and *pitchblend* or black oxide of uranium, are said to have been detected in this locality, but I was not fortunate enough to obtain a view of either of them.

The mineral the most interesting to mineralogists, which has been discovered in this quarry, and which is by no means of unfrequent occurrence here, is the *columbite*. A sample of this ore was, in old time, when America was but an infant, a suckling, in the arms of its royal mother, sent by Governor Winthrop as a nondescript to Sir Hans Sloane for his museum. It was known to have been discovered in some part of Connecticut, but at what particular point was a matter of mystery. It rested on the shelves of the London museums, and was gazed at by their visitors as a natural curiosity from the New World, for more than a century. In 1801 Mr. Hatchett, the celebrated English chemist, took it from the British museum, and, analyzing it, was the discoverer of the new metal which it contains, and which was, in honor of the country where it originated, named *Columbium*. The ore is called Columbite.

Within a moderate period this ore has been brought to light, not only in Europe, where it is called *tantalite*, but in several laces in Connecticut; in none, however, where it occurs so plentifully, as at the locality which I am describing. The largest crystal which the earth has, as yet, offered to man, was found here. It weighed fourteen pounds. The ore occurs in the feldspar, amorphous, and in prismatic crystals both perfect and imperfect. The color is bluish or brownish black. No use has, I believe, as yet, been made of the new metal, columbium, in either the arts or sciences, owing, perhaps, till recently, to the scarcity of the article. Human ingenuity will, without doubt, devise, ere long, some useful purpose, to which it may be advantageously applied.

Should I write you again, Messrs. Editors,* you may be assured, and so may your readers, that the letter will have the merit of being *shorter*.

* These letters were first published in the National Intelligencer, Washington, D. C.

LETTER IV.

July 27, 1838.

I am still at Middletown. In the early part of this day I went, accompanied by a gentleman of the city, to visit the locality of bituminous shale at Westfield, four and a half miles northwest from Middletown. This locality is already well known to those who study the wonders of Nature's handicraft. It has been described by Professors Silliman, and Cleveland, and by other eminent mineralogists. It has been the subject of a number of important remarks by a distinguished scientific foreigner, Mr. Alexander Brongniart, of France, Director of the national manufactory of porcelain at Sevres, a gentleman for whose polite attentions, shown me in years long since gone past, I still feel myself deeply indebted. From specimens of the shale, containing impressions of shells and vegetables, which were forwarded to him by Professor SILLIMAN, he was enabled to discover a similarity in the Westfield bituminous formation to that of Mansfield and Hesse, in Germany and thence predicted what substances might be expected to be found in this cis-Atlantic formation. A part of his prediction has been fully verified.

As this kind of shale is usually an indicator of coal, it was supposed that there existed here a deposite of this valuable substance. It was sought for. A shaft was sunk to a considerable depth, though not to one-twentieth of the depth to which it is necessary to descend in some places in England in order to reach the desired object, no coal, of any importance, being encountered, the search was abandoned. The shale is very bituminous, and therefore burns without difficulty, generating a clear, bright flame, and a strong odor of asphaltum. The odor may be produced by rubbing two pieces of the shale together, or by smiting the stone with a hammer, and I cannot distinguish the odor from that which I have often occasioned by scratching with a knife a sample of bituminous limestone, taken, a few years since, from the margin of the Dead Sea in Palestine.

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I rode to Westfield in the belief that I should find, in the shale, impressions, in abundance, of perfect fish and vegetables, but was sadly disappointed. This belief had been created by a passage in Professor Cleveland 'S Mineralogy. He says, the shale here "abounds with distinct and perfect impressions of fish, sometimes a foot or two in length, the head, fins, and scales being perfectly distinguishable." Such may have been found here in other times, but I had not the happiness to meet with any of their like. I found shale, it is true, in great plenty, filled with curipus impressions. The best samples I brought away were obtained by splitting the slate to pieces, which forms the sides and bottom of a little brook, which flows, muttering, over this locality. They presented a medley 2 10 broken fish and organized vegetables. Not a single specimen contained an entire fish. The whole were mere fragments—heads, fins, tails, and sections of the different parts of the body—enough, however to convince the most skeptical observer that they were once—perhaps before. Adam's clay was moulded into man—real, *bona fide*, living, nestling fish. What disaster buried, embalmed them here, to be gazed at by men centuries after? *When* did the event happen? Who can tell? O that I had a glass, by which I could look up the stream of time, even to its fountain, and survey leisurely, this ball of earth, in all the odd mutations it has been doomed to undergo since its Creator flung it from his hand awirling! I would then save the torture of many a philosophic brain, now pinched, and racked, and worn out, in useless theorizing.

Have you seen any of the *bird tracks* on stone which have been brought to light, in Europe, or this country, by recent geologists? As I was walking in one of the principal streets here, an example of these strange tracks was pointed out to me, in one of the stones in in the pavement. It was sandstone. The tracks were tolerably distinct, and of enormous size; much larger than the foot of any winged biped of which I have any knowledge. They occur in the sandstone of this region, and, I believe, the first published account we have of these is from the pen of Dr. Barratt, a mineralogist of this city.

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Will you permit me, Messrs. Editors, before I conclude this letter, to say five words about one of the youngest, and yet one of the most prosperous, of the Collegiate Institutions of our young country? I mean the Wesleyan University of Middletown. I have to-day passed several hours, pleasantly, within its walls, and in the interesting family of its President. The head of this establishment is, you know, the Rev. Dr. Fisk, a gentleman admirably qualified to fill the arduous and responsible station he occupies. I knew him, by reputation, many years since, and had formed a high estimate of his character; but, as accident lately associated us with each other, in a voyage across the Atlantic, and as I then became intimately acquainted with the qualities of his head and his heart, my opinion of him, as a gentleman of talents, a scholar, and a Christian, has been greatly enhanced.

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He conducted me first to the library. The books are, in general, of the best selection—conveniently arranged, and neatly kept. Among them I saw a complete set of the Philosophical Transactions of the Royal Society of London; a full set of the Latin Classics, and many of the Greek, and the most valuable of the modern scientific publications, both of the English and the French. The books amount, in number, including the libraries of the college societies, to between nine and ten thousand volumes. The collection, it must be acknowledged, is small, when compared with that of Paris, or of the Vatican, or even with that of Cambridge, but, considering the age of the institution, it is very respectable, and large enough for the *students'* use.

The rooms appropriated to the departments of mineralogy and geology are spacious, and well furnished with samples illustrative of those sciences. Here I met with some old acquaintances—four columns of basalt, obtained, by the personal efforts of Dr. Fisk, at the Giant's Causeway in the North of Ireland. Here, too, I saw the wonderful specimen of Columbite mentioned in my letter of yesterday; the largest known. It is not, I understand, the property of the University, but has been placed in the cabinet, by its owner, for the inspection and gratification of the curious.

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The chemical and philosophical apparatus appears to be very complete. The electrical and astronomical instruments are as perfect and as elegant, though not as numerous, as those at any college which I have visited in the United States. The astronomer who happens here, will have his attention drawn to a splendid altitude and azimuth instrument, a large reflecting telescope, and Russel's magnificent orrery, "a new and unrivalled instrument, and the only one of the kind in the world." It occupies the whole of a middle sized apartment.

The President is surrounded by an able corps of Professors, young, talented, and industrious, who seem determined by their exertions to do honor to the University, and to cause the University to honor and bless their country and the world. According to a college catalogue, which lies before me, the number of scholars 12 belonging to the four classes the past year is one hundred and thirty-five. It is now vacation. The annual commencement will take place on the first Wednesday in August. The prospect is fair, I am told, for a large accession of students the next term.

The buildings occupy a very eligible site in the most elevated part of the city. The lookers out at the front windows, which face the rising sun, have before them a noble panorama of one of the most elegant and delightful villages in New England, now in a flourishing condition; [Middletown, though an incorporated city, is, in fact, nothing more than a large village;] the Connecticut river pouring its flood along, now through verdant meadows, and now pent up, in a narrow channel, by the granite hills, and on whose bosom steamboats and smaller vessels are always moving, or moored at the wharf; a broad tract of country, variegated with hills and valleys, woodlands and fields, farm-houses and hamlets. But my paper is full. Should I address another letter to you, it will be dated at some point nearer the North Pole.

LETTER V.

Hartford, (Conn.) July 28, 1838.

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I bade adieu to Middletown late in the afternoon. The stage brought me into this thrifty city—the distance is fifteen miles—just as old Night was beginning to spread her sooty mantle over the works of man. The lamps were lighted, and showed me a number of elegant structures, which have sprung up since I was last in the “land of steady habits.”

Weathersfield, four miles from Hartford, lay on our route, the place of onions. The whole town is little else but a garden—productive, too, as the valley of the Wabash, and devoted, almost exclusively, to the rearing of this profitable plant. Many acres—perhaps hundreds—were overspread by this vegetable, giving promise of a full harvest. Cheer up, people of the Federal city. The 13 onions are not sun struck, if the potatoes are. Three months gone, and you will see Weathersfield at Washington, dealing out her strings of onions for the mastication of the inhabitants, and their boarders, the members of Congress. These, you know, are better than potatoes, for they gratify *two senses*, instead of one.

Hartford is a large, rich, pleasant, inland city, of perhaps twelve or fourteen thousand people. The location is auspicious for its growth, standing, as it does, at the head of sloop navigation on the Connecticut river, where most of the merchandise, demanded by the wants of the inhabitants of Western Massachusetts and New Hampshire, and the eastern section of Vermont, is transferred from vessels to flat-bottom boats, for the purpose of making its way northward. A small steamboat “walks in the water” between this place and Springfield.

The people of Hartford are industrious, enterprising, and wise—consulting their interests, their duty, and their lasting honor. The quill has given to some here, who wield it, wealth and respectability—to others a fame which will never die. Here resides Dr. J. Comstock, the author of many valuable works on chemistry and its kindred sciences. Here lives Mrs. Sigourney. The type is not idle. Hartford, you know, is renowned for book-making. She prints a multitude of books, which are published in New York. Here the traveller finds all those institutions which knowledge, religion and humanity recommend and sanction—schools, of the first order, both for males and females, academies, churches of all

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descriptions, Congregational, Episcopal, Methodist, Unitarian, Baptist, Roman Catholic, and Universalist. It is, in truth, a church-going community, and why should it not be, for all tastes can be suited.

What elegant edifices, the voyageur will ask, are those, which adorn the high grounds, back from the city, and are seen as one comes in from the South? I will tell him. And here let me say that the first occupies, according to my fancy, the most delightful spot, and is the most showy. The building is long and lofty, the wings extensive, the garden roomy, with high walls, and the whole white as the drifting snow. It is glorious establishment, founded by the State, in which many a distracted spirit, wild and frantic, has, by the practice of gentle and persuasive means, been brought back to rationality, to friends, and to happiness. The second, which appears in the distance, of a brown or dingy hue, is Washington College, consisting of two noble structures, built of sandstone, and whose architectural proportions are much admired. The One, standing on the northern elevation—a few rods beyond the charming mansion where Mrs. Sigourney and the Muses lately dwelt—is the American Asylum for deaf mutes—the first establishment of the kind in the United States, and the first, it is presumed, in the New World; an establishment, which owes its existence to a Dr. Cogswell, of this city, who was moved to efforts in its behalf, by having a little daughter, blessed with an angel's intellect, but unfortunately denied the powers of hearing and of utterance—and to the Rev. Thomas H. Gallaudet who was, during many years, its able and learned President. The latter gentleman has evinced a strong interest for this long neglected and unhappy class of his fellow-beings, not only by devoting the best and major portion of his life to the melioration of their condition, but, also, by taking for his bosom companion—the other half of himself—one of his deaf and dumb pupils. Mrs. G. is an excellent lady-like woman, and now the mother of a number of promising children, whom Heaven has blessed with the use of all the inlets to knowledge and happiness.

There is a splendid private dwelling between the College and the retreat, recently erected. It is the property, and the residence, of his Excellency Wm. Ellsworth, lately, as you know,

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a most worthy member of Congress, and now Governor of this Commonwealth. I need not tell you that this city is one of the seats of the State legislation; New Haven is the other.

Hartford is an old town—one of the earliest settlements in Connecticut. The bones of the sainted Hooker, one of the “Pilgrim fathers,” are here—bones which will, at the first blast of the resurrection trump, wake up, and join their kindred spirit in the upper Paradise. The old “Charter Oak” is still here, green and growing, dipping its roots deeper, and spreading its branches wider, as it did centuries ago, and as it promises to do for a century or two to come. You remember the story of the lost charter, and how it was concealed, 15 by one of his Majesty's rebellious subjects, during a long period, under the roots of this stately oak.

But, hold! I am running wild. I have, as you see, left my favorite nag, and am riding a wrong horse. Pardon, me, Messrs. Editors. I intended, when I placed myself at the writing table, to say something about a locality of the sulphate of barytes about a mile from the United States Hotel, where I am scribbling—a locality which I have often visited in days gone past, and where I have found, not only the sulphate of barytes, or heavy spar, but also green and blue malachite, and variegated copper. I have no time, at present, to examine rocks, or to talk about them. It is now ten in the evening, and in half an hour I shall step into the stage, and make a nocturnal excursion up the valley of the Connecticut river, passing through Springfield, Northampton and Brattleborough to Walpole, from which place I designed to send you this letter. As it is written, I now take the liberty to forward it, assuring you that you have my full consent either to place it in the Intelligence, or to light your cigar with it.

LETTER VI.

Belows Falls, July 29, 1838.

I arrived at this romantic resting-place at 3 o'clock P.M. The distance from Hartford is, I believe, on hundred and ten miles. The Telegraph stage, which was the instrument of my locomotion, has moved over this space in about sixteen hours. I have been conveyed,

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perhaps fifty times in the course of my life in a public carriage, over the same route, but never so rapidly, or so comfortably, and yet much of the journey was performed in the darkness of the night. The horses were swift and sure-footed, the drivers sober and accommodating, and the coach exceedingly well adapted to minister forgetfulness to the drowsy traveller. Old Morpheus and myself were bosom friends during five unbroken 16 hours. Indeed, you can, I assure you, sleep as quietly and as safely in this vehicle as you can in an English post-chaise, or in the coupe of a French diligence. Thus much justice demands of me in behalf of the Connecticut river Telegraph stage.

What a change! Who remembers the stage—the clumsy, wagon-like stage—which ran on this road thirty-five years ago? I remember it well, being then a resident in this region. It came up once a week; and its arrival was hailed, by the good people of the land, as a marvelous event. The coach, if it may be called such, had wooden springs, and, sometimes, no springs at all. It had no side door for the admittance of passengers. In those days, such a door would have been accounted a needless luxury. You entered at the front part. Many a time have I clambered in, just back of the posteriors of the hind horses, at the no small risk of feeling the momentum of the quadrupeds' hoofs; and being well entered, my next business was to crawl back over the lumber, bags of oats, kegs, jugs, the mail, newspapers, to be distributed along the road, and whatever else the driver saw fit to transport, to a seat, if I was so lucky as to find one.

During the rolling away of this period, important improvements have been introduced. They are visible in the general appearance of the country, in the enlargement and increased decoration of the villages, in the melioration of the roads, in the cultivation of the soil, and in the modes of travelling. But had this beautiful valley been situated in Pennsylvania, or New York, or even in Ohio, vastly greater improvements would have been accomplished. Rail-roads would have crossed it at two or three different points. The Connecticut river would have been rendered navigable by steamboats the whole distance, from its mouth to Newbury in Vermont. The wares of the merchant would be transported at one half, and, perhaps, at one fourth of the sum, which their conveyance now costs. A bustling scene

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would meet your eye. The hum of business would be heard in places where silence now reigns. Instead of the flat-bottom boats moving with snail-like slowness up the stream, by the force of the boatman's oars and poles, as they now do here, as well as on the Rhone, and as they did twenty-five years 17 ago on the Ohio and the Mississippi, the Fulton vessel would be every where seen executing the business of transportation in one tenth of the time, and with one-thirtieth of the labor.

But the smaller States are best by disadvantages which are unknown, or but slightly felt, in the larger ones. They are wanting in enterprise. Their revenues being limited, the views of the inhabitants become limited. Thinking it possible to accomplish any thing great, they attempt little or nothing. Their minds are narrowed, and they envy the lot of those individuals who belong to the wealthier, and bolder, and more prosperous communities. The members of the State Legislatures are timid, and fear to vote for the appropriation of the People's money, lest their popularity should be hazarded, and their offices. This circumstance alone does much towards keeping the minor States in the background in relation to the momentous improvements, which are effected by their more opulent, and therefore, more fortunate sisters.

Bellows Falls is a charming spot. Here the Connecticut, which, in the Indian tongue, is said to signify the *long* river, passes over a succession of granite rocks, uttering, without a moment's cessation, the same loud monotonous minstrelsy it did five thousand years ago. Here, the water becomes so condensed by its fall, says an early historian—the self-styled Bishop Peters—and who will dare discredit the assertion of a bishop?— *that an iron crowbar be forced into it!* On the eastern side, and hard by the stream, rises Fall Mountain, bleak, and rugged, and lofty, clothed with lichens, and dwarfish evergreens, and massy rocks, threatening, every moment, to fall on, and crush to powder, the passer-by. Close under this towering and steril elevation, stands an elegant mansion, owned by the proprietor of the bridge, which here bestrides the river, at its narrowest, noisiest point. The worthy family, occupying this edifice, surely have a right to accuse the sun of

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very censurable sluggishness, for he lies in bed, so far as relates to them, till eight or nine o'clock every morning.

You cross the bridge from the Granite State to that of the *viridis mons*, or Vermont. You first pass a very narrow strip of 318 alluvion, formed at a recent epoch, then ascend, gradually forty or fifty feet, cross the Bellows Falls canal, and come upon a plain of moderate area, where you behold the business part of a neat, thriving little village, made up of a number of good houses, stores, offices, work-shops, post-office, a large hotel, and, in the language of Major Downing, “a pretty considerable bustle.” You next mount to another plain, sixty or seventy feet higher—a plain of broader extent, over which the waters of the Connecticut, beyond question, once flowed, and which they gradually generated by the deposits of earthy materials brought down from higher lands, but at a period some fifteen or twenty thousands of years prior to their formation of the platform below. On this plain are the elegant and commodious residences of many of the wealthiest inhabitants of the village. Three sumptuous dwellings, however, stand on a still more elevated terrace, at the south, which have a very beautiful appearance, as seen from a distance. But on *this*, besides the private buildings, are two churches, one Episcopal, built in the gothic style, and the other Methodist, both furnished with towers, and bells, and a large school-house. Here stands the mansion in which I am now writing—one which has long been, and ever will be, dear to me. But in this cherished spot every thing has a tongue, and admonishes me of the brevity and vanity of human life. The charming grove of locusts, mountain ash, and flowering shrubbery in front of the door—the luxuriant vine which climbs the pillars, and forms graceful festoons along my windows—the garden in which I have often feasted on the luscious grape, in days gone past, never to return—all wear a melancholy hue, and tell me, in language which needs no interpretation, *that this world is not my home*. Why this preaching? you will ask. I have reason for it, my friends. You know the feelings of a heart rent asunder by the removal of one whom it cordially loves and venerates. The house I am in was the late residence of a dearly

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beloved brother, now in Heaven, who was to me more than a brother. Yes, gentlemen, from this very chamber, his spirit, winged with faith and love, took its upward flight.

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I have just been to see the place where the dead are congregated. It is near the Episcopal church, in the midst of a flourishing grove of evergreens Of Nature's planting. Every thing in it is neat and appropriate, reminding the visiter of his duty and his end. I entered the sacred enclosure, and casting my eyes over the sepulchral monuments, which are growing multitudinous, one, differing from the rest, fixed my attention. It was a quadrangular block of white marble, surmounted by a pyramid of the same substance, the whole resting on a base of red sandstone. I drew near, and, placing my hand on the snowy marble, read, but not without dropping a tear:

“Sacred to the memory of the Hon. William Hall, who departed this life February 7, 1831, aged 57 years. Few have passed through life more honored and beloved; for in his character were united, in an eminent degree, the virtues which constitute the perfect man. Kind and obliging in his disposition, he found his own happiness in promoting that of others. Although his life was spent in doing good, his whole trust was in the righteousness and meritorious sacrifice of his Redeemer. By his early and sudden removal, his country has lost a wise and faithful counsellor, the benevolent institutions of the age a cordial friend and patron, and the church of God a bright and consistent example.”

When I had finished, I could not help exclaiming, would to Heaven, sainted Spirit, now looking down, perhaps from a chamber in that mansion on high not made with hands, on me, weeping over thy mouldering remains—would to Heaven I could pay thee the debt of gratitude I owe, for thine ardent love and more than fraternal kindness. It cannot be. But thy deeds are engraven on the tablet of my living heart in characters deep and durable. Time cannot obliterate them. Eternity will not wear them out. May my last end be like thine!

My dear sister-in-law dwells here, and I have concluded to remain a few days longer an inmate of her family. You may possibly, hear from me once more before I return.

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LETTER VII

Bellows Falls, August 1, 1838.

Half a mile below the Falls, on the western side of the Connecticut, and not ten feet from the public road, exists, in a ledge of granite rock, the rare mineral, called, in honor of its original discoverer, Dr. Wavell, of England, *wavellite*. The substance is composed, principally, of alumine and phosphoric acid. Its usual external appearance is botryoidal, or like a cluster of grapes, (the term is derived from the Greek *botrus*;) and, when the nodules are broken open, they present a beautiful assemblage of acicular or needle-shaped crystals, of a pearly lustre, radiating from the centre in all directions. This is, I believe, the first wavellite found in the United States, and was discovered, several years since, by that distinguished geologist, Professor Hitchcock , of Amherst College. It is now known to exist in a number of other places, in different parts of the Union, particularly in the vicinity of Nashville, Tennessee, and in the western section of Pennsylvania. I endeavored to obtain specimens from this locality, but with little success. The rock in which the wavellite is scattered is much harder than the mineral sought. It is, therefore, quite impossible to break the granite, without, at the same time, crumbling in pieces the wavellite. Samples of it might, perhaps, be procured by blasting the rock, which I had not the means of doing.

Two miles below Bellows Falls, in Walpole, New Hampshire, and near the summit of a high hill—a spur of Fall mountain—occurs the carburet of iron, or plumbago, or, if you prefer the more common, but improper name, *black lead* , in mica slate. At the surface, the substance is neither rich nor abundant. A purer kind, and more plentiful, might possibly be brought to view by digging. With the mica slate is intermixed ferruginous quartz, in which

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are embedded minute, but very delicate, crystals of tourmaline, deeply striated. They are of a reddish-brown hue, and bear a strong resemblance to one variety of the oxide of titanium. I was conducted to this locality by William Henry , Esq., cashier of the 21 bank at Below Falls, a gentleman who takes much interest in the development of the objects of curiosity, as well as those of real value, hidden in the earth, in the region of country around him.

It may not be generally known that granite of the best quality is met with in numerous townships in the eastern half of Vermont, and that its applications in the arts and business of life are becoming exceedingly multifarious. It is employed, not only for making stone wall, for the enclosure and division of farms, for stoning cellars, constructing] vaults, underpinning framed buildings, the abutments and piers of bridges, but as a materiel for the door and window-sills and caps of stone and brick edifices, and for the posts of post-and-rail fences. The last application is one of recent adoption, but extremely important and ornamental. The posts are of about the size of the ordinary fencing posts, are easily got out, planted deep in the earth, and the rails are connected to them by iron fastnings Many door-yards and gardens, and some more spacious grounds, are enclosed in this manner, and their appearance is eminently gratifying to an eye, which loves to look on things built for durability, for future generations to enjoy. The rails will decay and disappear, but the posts will remain undecomposed, till the coming of the earth's final conflagration, or till some calamitous volcano shall, unlooked-for, burst forth here, and liquify them.

In Springfield, Vermont, two miles south from the East Village, there is an extensive and valuable quarry of granite, which supplies the country, on both sides of the river, with this article for many miles around. The granite is compact, and very beautiful. The quartz and feldspar are of a grayish-white aspect, and the mica a combination of the brownish-black and the silvery-white varieties, all minutely comminuted, comminuted, and well mingled. Of this substance, I have supplied myself with a number of good specimens. It is curious to witness the change which has, within a few years, taken place in regard to the estimate placed on land in this region. That which was formerly accounted worthless, because of its

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unfitness for vegetable production, is now held, especially if it contain granite or limestone, at a higher price than the best wheat or grass land.

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Three quarters of a mile west from Weathersfield meeting-house is a locality of asbestos, chiefly of that kind termed *earthy*. It occurs in the bottom and on both sides of a small brook, and is connected with talcose and mica slate. The best samples of this mineral which I procured were obtained by digging down about a foot in the bottom of the brook. They were interspersed with impure amianthus. The mica slate, in the neighborhood of the asbestos, would form a more convenient building stone than any I have ever elsewhere seen. The hammer is hardly needed. Nature has prepared it in small square blocks for the mason's use. Gneiss, also, abounds in this vicinity.

When I finished my last epistle, Messrs. Editors, I thought I should not trouble you or your readers with more than one other letter; but my pipe is not yet out—the story is not all told. Do you wish me to *stop* before I have *done*? Certain great speech manufacturers, it is said, do not always stop *when* they have done. In *this* respect, I can assure you, I will not imitate them.

LETTER VIII.

Springfield, (Vt.) August 3, 1838.

Accompanied by my brother, whose hospitality I am now enjoying, I made a trip yesterday to Plymouth, formerly Saltash, a township abounding in valuable minerals, and one which has long been celebrated for the quantity and quality of the lime burnt there. My main object in making the excursion was, to examine some beds of marble, which have recently been exposed to the light, and whose products are much admired by connoisseurs of the article in the cities of the North, where they are beginning to have the honor of being associated with the finest marbles of Carrara, and the Isles of the “Great Sea.”

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Of this marble, there are several deposits, owned, and to some extent, worked by a chartered company, styled "The Black River Marble and Soapstone Manufacturing Company." Their agent 23 and superintendent is Ilock Hills, Esq. an intelligent and obliging man, who cheerfully affords to the visiter all the information in his possession, relating to the business of which he has the management. These deposits all lie within half a mile of Black river—here a diminutive stream, which comes rumbling down from the Green mountains, among which it has its origin, and, in its passage through Plymouth, dilates in three or four places, forming a succession of broad and beautiful ponds, renowned, far and wide, for the abundance and excellence of their fish, which fill with animation the pellucid waters, and, leaping up, say to the angler, "come and catch us." They are chiefly the trout and the pickerel.

The most northern quarry I did not visit, for the rain poured down with such copiousness, that my ardor for rambling in the woods, was, I assure you, a good deal cooled. In the midst of that quarry is, I am told, entrance to the "Great Plymouth Cave," cried up by travellers, and historians, and geographers, as the "eighth wonder" of Vermont. It has, they inform us, four or five distinct rooms, varying in diameter and height from five to twenty-five feet, all roofed and floored with solid limestone. In these boreal, never-heated, primitive regions, it is not strange that this cave should be termed "great"—something extraordinary—out of the common course of Nature; whereas a Kentuckian, who goes the whole hog, would call it a rabbit's burrow, or a swallow hole, when he contrasted it with his own "Mammoth Cave," in which I have groped my way more than two miles in a single direction.

The quarry to which we first directed our steps is situated on both sides of a petty babbling brook, which is tributary to Black river. The rock is a fine-grained, granular, carbonate of lime, and, when polished, exhibits, in dots, stripes, and clouds, a remarkable diversity of delicate colors, such as pale pink—red, grayish white, and dark chocolate brown. A few rods south from this, on land belonging to Mr. Jonathan Hall, and not far from his house,

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is another deposit. This rock has felt but few of the blows of the blaster's hammer. It is the quarry least worked. Its position is somewhat singular. A gneiss rock, regularly stratified, runs into the earth, on the side of a precipitous bluff, forming, by its lower surface, an angle, with the ordinary horizon of forty or fifty degrees. Immediately under the gneiss, and in contact with it, is a vein, in some places two or three feet thick, of micaceous oxide of iron, (the *fer oligiste ecailleux* of Haüy,) similar in appearance, to that of the iron mountain in Missouri, but less rich, yielding, as I am told, but about forty percent., of metallic iron. The privilege of digging this ore has recently been purchased, Mr. Hall informed us, by Isaac Tyson Jr. Esq. for eight hundred dollars. Removing the vein of iron ore, you see, below, the bed of marble. A number of tons of the rock have been thrown out. It contains no foreign matter to injure its appearance, or its durability. The color of the masses, which I examined, was white with a faint tinge of red.

The quarry most wrought, and furnishing the marble most esteemed in this part of the country, is placed about three miles south from the one last mentioned. The substance when well polished, is exceedingly ornamental. The critical observer will, I think, see in it some feeble evidence of its having originally been formed of organized matter. Its ground is black, or dark brown, and diversified with long stripes, and figures of varied shapes, in white. I have seen no marble of the same appearance in the United States.*

* Samples of this marble may be seen at the Antique Book Store of Mr. J. Riordan, on Pennsylvania Avenue, Washington, D. C.

It bears a slight resemblance to a kind of marble said to be found in Tuscany, samples of which I have seen in the Vatican at Rome, but have forgotten its name.

The quantity of marble existing in Plymouth, no one has the means of duly estimating. From what appears on the surface of the earth, and near it, you would say that a thousand quarrymen, constantly at work, and a hundred manufacturing establishments, always in operation, would not, for a century to come, materially diminish its amount.

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In the vicinity of the quarries, the company have an establishment, in which the stone is sawed, polished, and shaped into fire-places, hearths, tomb-stones, centre-tables, wash-stands, covers of 25 side boards, &c. &c. The mill is seventy-feet long, and thirty wide, with a wing twenty-eight feet by eighteen. It contains six sets of toothless saws, with thirty saws in each set.

Five or six south from the marble mill, you will come to extensive iron works, the property of that enterprising and skilful metallurgist; Isaac Tyson, Jr. Esq. of Baltimore. Here is made pig iron; also, kettles, stoves, ovens, and, indeed, most of multiplicity of castings demanded by the wants of the American community. The works are new. Last Autumn, they were put in motion for the first time. Many of the modern improvements employed in European establishments to facilitate the removal from the iron of its foreign ingredients Mr. Tyson has wisely introduced. the heated air furnace I here saw at work to great advantage. The results of the operation are, as yet, extremely flattering. Most of the articles are engaged before they are made. The pig iron produced here is said to be superior to that from Scotland. The ore fused is a mixture of the brown hematite, found in exhaustless abundance with-in half a mile of the furnace, and the micaceous oxide already mentioned.

These two establishments, together with another which I am shortly to notice, will, I am persuaded, be of immense utility to the country, and particularly to the eastern section of Vermont; for they will draw, from under ground, substances which have been quiescent there, and useless, from Adam's days to ours, and *transmute* them, without the aid of the alchymist, into gold and silver, or, what is better—at least for the traveller—into good bank bills.

In the neighborhood of the iron works are found the oxide of manganese—so important in the art of bleaching, and for numberless other purposes—and the sulphuret of molybdena. On a hill, not far distant, occurs the spathic, or carbonate of iron. Some of it is blood red,

and exhibits a fine play of colors. It is a valuable ore. It yields good malleable iron, and may easily be converted into steel. It is therefore, sometimes denominated *steel ore*. 4

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LETTER IX.

Springfield, (Vt.) August 4, 1838.

Follow Black river down six or eight miles, and you are in the township of Cavendish, on the main road leading from Rutland to Bellows Falls, and to Boston. Shortly after your arrival on that road, your attention is drawn to a vast deposit of Serpentine, situated on your left, as you travel south—a vaster one than any other in the Union, and vaster, it is believed, than any other, of which we have a description, on “this terrene ball.” It forms a hill of considerable altitude, and reaches over many acres—I might perhaps truly say many miles—in area. Its upper surface has, by the action of the elements, lost its *green*—its hue of the serpent—and become of a grayish white. The *bleaching*, however, does not extend more than an inch or two below the surface, where the rock resumes its native green, of various shades. This object of curiosity has, within the last twenty years, drawn me often from the highway, to inspect and admire it. Once, when breaking a specimen of it from a huge ledge, I said to a bystander, “This is serpentine, the substance of which, Pliny informs us, the Romans made fryingpans, vases, &c. The time will come when its proprietors will account it valuable—when it will be employed, instead of marble, for articles of ornament and usefulness.” The man looked on me with a stare of incredulity, and replied, “No, sir; that hill of rocks there is good for nothing, and ever will be—a worthless waste—a mere dead weight—placed there, Saturday night, after creation was over, to be forever in man's way.” But He who dropped it, and who does not often operate in vain, knew better than he.

It was very gratifying to me to learn that my prediction was beginning to be fulfilled. Blocks of the rock, removed from their original lodgments, are now sawed into slabs, and

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manufactured into tables, and other articles of furniture of various descriptions. The stone is tough and hard, and yet the agent assured us that it is sawed with greater facility than even soapstone, and with less injury to the saw. The project is a new one. The operations are 27 just commencing. The privilege of quarrying and working the serpentine belongs to the Black River Marble and Soapstone Manufacturing Company. They are now engaged in erecting a large established on Black river, for sawing and manufacturing the mineral, one hundred and fifty feet in length, and fifty in width. A considerable capital will be required for the completion of the works. None of the serpentine has, tops of bureaus and sideboards, have been produced at the markable establishment in Plymouth, and are now at the house of the superintendent, Mr. Hills, situated one mile north of Proctorsville, a village belonging to the township of Cavendish.* These articles present a splendid appearance, particularly when moistened; but; but, I regret to say, they are not highly enough polished. The American workmen are yet too green at the business. They are too sparing of their labor. They have not the patience, the perseverance, nor perhaps the skill and taste, of the Italians. The serpentine is of as good a quality, and susceptible of as high a polish, as that ordinarily employed by the ancients, and is not unlike the beautifully polished fragments which the traveller meets with among the ruins of the ill-fated Pompeii, and in the remains of the Mosaic pavement at Adrian's villa, near Tivoli.

* I am formed, by a letter lately received from Mr. Hills, that the above-mentioned articles, together with samples of the Plymouth marbles, are at the present time in New York, at the Repository of the American Institute, 187 Broadway, brought there for exhibition, and I suppose for sale. The object of Mr. H. in visiting that city is to procure additional funds, by the disposal of the Company's unsold stock or otherwise, for the purpose of enabling them to complete their buildings, and to carry on their operations on a broader scale. Confident of the goodness of the materials, and of their abundance, I cannot but wish him success. Were the capitalists of New York to visit those localities of serpentine and marble; they would not, I am persuaded, long hesitate to furnish the Company with the aid they need. I would much sooner vest money in this undertaking than in Western lands.

The quarrying is not difficult. The rock rests on elevated land. You have no *up-hill* work to perform. The substance is rent from its connexion by the force of gunpowder, and drawn down by oxen to the mill, which is but a few rods distant.

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In the same edifice it is designed to saw and manufacture, also, steatite, or soapstone, an immense body of which lies alongside of the serpentine. Indeed, this mineral is abundant, not only here but, likewise, in a number of the neighboring townships, in Windham, Grafton, Westminster, Athens, and Townsend, in several of which it is extensively worked. This substance is, it is believed, applied to more uses than any other in the mineral kingdom. It is manufactured into aqueducts, pumps, door-steps, door and window caps and sills, inkstands, loom-beams, furnaces, ovens, caldrons, &c. It is employed by the Arabians, in its unwrought state, instead of soap. They rub their skin with it when they bathe. It is used for removing grease spots from clothes. It is eaten by savage nations for food. I could give you a much longer list of its uses.

In wandering over the soapstone rocks, I observed, towards the northeast part of the hill, a kind of steatite, known by the name of *pot stone*, so called because it was made by the Aborigines of our country into *pots* and pans. I have in my possession parts of culinary vessels manufactured from this substance by the Indians, and dug from the earth, a few years since, in the northwestern section of this State. Brongnart tells us that the Grisons, in Switzerland, still employ this stone for the same purpose. Near the pot-stone is a large deposit of chlorite. The name is derived from the Greek *chloros*, signifying green, the usual color of the mineral. In the chlorite you find, sown thickly, perfect octaedral crystals of magnetic oxide of iron, varying in size from a pin's head to those of half an inch in diameter. They are the common accompaniment of this mineral. Chlorite is a soft, sectile stone, and, when ground with oil, forms a pigment. Connected with the steatite, occurs also talc, indurated, common, and foliated, the last of a pearly, greenish hue, and unusually delicate. This substance, Professor Cleaveland assures us, forms the basis of

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the *rouge* employed by ladies. It answers well to plaster up old faces, and make ugly ones look decent—at a distance. Will not exercise and good health place on the delicate cheek the fairest and the most acceptable *rouge*? It affords me pleasure, however, to cherish the belief, that the ladies of the Federal city make *no use* of this artificial decoration.

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LETTER X

Springfield, (Vt.) August 6th, 1838.

My brother and myself have this moment returned from a trip to the place where the largest beryls occur, which have ever met my vision. The locality is in the township of Acworth, New Hampshire, ten or twelve miles from Charlestown, on the Connecticut river, and about two miles southeast from Acworth meeting house.

New Hampshire is, very appropriately, styled the *Granite State*. One-fourth part of its surface—I allude chiefly to the northern counties—is covered with this primitive rock, and its near neighbors, gneiss and mica-slate. And yet it might as fitly have been christened *the Up and Down State*. These words are graphic; they describe it perfectly. Off from the water-courses there is little level land, scarcely enough to place a table on, without hazard of having its contents shipwrecked. You might possibly find room to *locate* a bed, where its occupants would not roll off. But the soil, what there is of it, is naturally good, or industry has made-it such. You see noble farms here and there, some perched on the summits of broad and lofty mountains, spotted with sheep, and cattle, and orchards, and golden wheat-fields; others, no less productive, thrown into deep and dark glens, where the sun seems a stranger. Comfortable habitations, and some elegant ones, capacious barns and other out-buildings encounter your eye, both on the highlands and in the valleys; but no mud hovels are seen, like those of Ireland, no log-houses, none of the abodes of want and wretchedness. Every town, every village, every hamlet, has its church or its churches, and its school-house, usually white as Parian marble, furnished with a bell, and occasionally

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with a clock, to give public note of the fast-flying hours. There are no riches here, and no poverty—no haughty landlords, and no crouching serfs—no Astors, and no beggars.

Among these iron-bound hills the men are not drones, nor the women; they are all operatives; every one labors; necessity is his 30 master. Learning is popular and universal. Every boy and girl go to school, or may go. Every man, woman, and child, if of any size, can read, and write, and cipher. Ignorance, in these regions, is a disgrace, a foul stain upon one's character, which he feels deeply, and strives to wash out. To find a man here, who cannot read his bible and cast his accounts, is an occurrence as rare almost, as a transit of Venus. I have lived more than forty years in New England, and have not, in that long period, met with ten individuals there, of mature age and blessed with reason, who could not read and write. After all, is not this rough, rocky, boreal region the real Arcadia? It is the land in which Agur, methinks, would delight to live. He craved “neither poverty nor riches.” Here he would have his heart's desire.

Allow me, gentlemen, to whisper in your ear a word of advice. If you want to hire a good laborer to manage your farm, a real bony, athletic, honest man, one who will toil, uncomplainingly, from the gray dawn of day till the shades of night fall upon him, avoid seeking for him in the valley of the Connecticut. The soil there is too rich. Men live too easy. The laborer rises late, works slothfully, is often an eye-servant, and quits his task at an early hour. But go back from the river, among the mountains of Vermont or New Hampshire, where the human body is better compacted, and the sinews are larger and lustier, and you will find him.

Laziness, I speak from what I know and feel, is natural to man as breathing. It is born with him, lies in his bosom, a Pandora's box, ever opening to let out his plagues. It twines around him as closely as the serpent did around the bodies of Laocoon and his sons. Nothing can cast out the evil demon, and make us *men*, but blessed necessity. This personage is at home in the rugged, rock-clad portions of New England, and he there makes rosy-cheeked boys, healthy, blooming girls, faithful, hard-working laborers,

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industrious students, able statesmen. A farm in Illinois will, with two day's labor in the week, give its owner food in abundance for himself and family—and what else does it give him? Indolence, sluggishness, 31 sends him tavern-hunting, cock-fighting, horse-raceing four days in the week, and perhaps five. This is no fiction; it is sober truth; I had it from the lips of a *sucker* , in his own house. In the hard, stubborn soil of the Northern mountains, man toils and sweats six-sevenths of the week, and gives to Heaven the rest. O, New England,

“With all thy faults I love thee still.”

But where am I roving? I began to talk about minerals, and, after saying five words, ran off, like all the rest of the world, to the *West*.

Without much difficulty we found the house of a Mr. James Powers , to whom we had been recommended; the man who procures the mica for Nott's stoves. The habitation was small, one story high, had two or three rooms, and was surrounded by a pretty little yard, carpeted with grass, green as emerald. The owner, with his two sons, sprightly fine-looking boys, stood at the door as we rode up. They had just finished their mid-day repast. I told him our errand. He received us kindly, and invited us in. One of the lads ran to the barn to bring hay for the horse. The good woman was tall , slender, comely, had seen about forty winters, was comfortably clad, and so were three or four little children, who now made their appearance—these hills are fruitful in children as well as rocks—in handsome homespun garments. Our apartment was diminutive and the furniture plain, but the floor was clean, and white as that of the Presidential parlor, or as soap and water and hard rubbing could make it. “Wife, these gentlemen have had no dinner.” She said nothing, but set herself to work, and in fifteen minutes our table was spread with all that nature demands or hungry men need.

Dinner over, we betook ourselves to the mineral shop, where were plates of mica of all sizes and shapes. The substance is brought, rough and shapeless, in a wagon, from

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the hills in Acworth, and the neighboring townships, and here assorted, split, and cut, by shears, in any desired form and size. It is then packed in 32 boxes and sent to New York or some other market, for sale. It is employed, instead of glass, in stoves, lanterns, &c. It might advantageously be used, as it was in ancient times, under the name of *lapis specularis*, for covering green-houses, and for the construction of bee-hives. For these purposes it would answer better than glass, for it is not so easily broken, and, when pure, is equally transparent. In this vicinity the article is very abundant. Mr. P. informs us that he has, in the course of two or three years, got out and sold mica to the amount of \$2,800. In searching for mica, he finds many other interesting minerals, which he disposes of to mineralogists on very reasonable terms. After engaging him to prepare and forward for me to Bellows Falls a box of specimens, we proceeded to a hill half a mile distant, under the guidance of Mr. Powers' sons.

Ascending three or four hundred feet above the level of the road, we came to a singular mass of rock. The lower part of it was chiefly rose quartz, of different intensities; that nearest to the surface; and consequently most exposed to the bleaching influence of the sun; being of a pale red, approaching white. In some places, however, on the very surface, it exhibited a bright carmine red. In general the interior of the rock is most deeply colored. This beautiful substance was extremely hard, but I did not spare the hammer, till I had procured as many samples as we could conveniently bring away. A few yards further up the rock we met with a dingy, greasy kind of quartz, interspersed with beryl, remarkable both for its quantity and the magnitude of its crystals. It is, in part, massive, and in some places appears to constitute veins, a foot or more in thickness, running through the quartz. Most of it, however, is in large, overgrown, imperfect, hexagonal crystals, of a light green color. We saw several which were little less than two feet in length, and from eight to twelve inches in diameter. One, of giant size, still firm in its bed, presenting to the eye only one its extremities, I had the curiosity to measure. Its diameter is exactly two feet and three inches; more than twice as large as the largest mentioned by Cleaveland. Its length

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is unknown. 33 I procured one seventeen inches long, and ten and a half in diameter, which Mr. P. promised to send to me.*

* Any person who wishes to furnish himself with the beryl, rose quartz, mica, tourmaline, &c. &c. of Acworth, can be gratified by writing for them to Mr. James Powers. The letter must contain the exact *inscription to be placed on the box, the route by which it is to be forwarded*, and a *Northern ten dollar bank note*. Such a letter will bring to the writer, I have not the slightest doubt, the full value of his money.

Here and there, in the rock, you meet with blotches of mica, of very extraordinary size, and perfectly free from the quartz in which it is embedded. I obtained in one of them the amplest sample of mica which I ever had in my possession. It is eighteen inches long, and fifteen in width. But this is only a pigmy in comparison with what Dr. Thompson tells us is found in Russia, where it sometimes “occurs in plates two and a half yards square.” Twenty or thirty feet higher up, forming the summit of the rock; is an immense quantity of pure white feldspar, which has been employed in the manufacture of artificial teeth, and might be used for the glazing of porcelain ware.

The whole, taken together, in indeed a very remarkable deposit. Nature intended it for a large batch of granite, and furnished all the materials; but when the pudding was made, its parts were not sufficiently agitated, comminuted, and mixed; or, to use more technical language, the pudding was not faithfully *stirred*.

LETTER XI.

Bellows Falls, August 7, 1838.

In my past communications, Messrs. Editors, I have given you a picture of a rambler's *seeings* and *doings*—the result of my own observations. Suffer me to construct *one* more letter—the last, positively, you will have from my quill in this granite region—with materials furnished chiefly by abler and worthier hands—I mean those of the Rev. Professor

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Hicthcock, and other gentlemen of similar celebrity, who have been his *collaborateurs* in this 5 34 Northern productive field. Methinks I shall render an acceptable service to those of your mineralogical readers who may, per-hazard, be unacquainted with the New England minerals and their localities, by enabling them, at a single *coup d'œil* , to see, or to fancy they see, a goodly number of those which exist in the valley of the *Long* river, and at places not far removed from it. In doing this, I shall disregard all systematic arrangement.

Stilbite abounds in the trap-rock at East Haven, Connecticut, in well-formed crystals, of a white color; at Woodbury; at Hadlyme; associated with garnet, epidote, scapolite, apatite, and heulandite.

Prehnite —so called from Col. Prehn—“at Woodbury, in mammillary and botryoidal masses, lying loose among the stones at the foot of precipices. The color is a delicate green. I have seen it nowhere so fine or so abundant in this country.”—(Silliman.) Plentiful among the debris of trap-rock in Farmington, Cheshire, Simsbury, Southbury; also at Deerfield and Greenfield, Massachusetts.

Epidote , in crystals of an elegant pistachio green color, occur in Hadlyme and Chester; at Tolland, Saybrook, Litchfield, and Washington. The finest specimens of epidote in my collection I procured in the vicinity of the iron mine in Franconia, New Hampshire.

Zoisite —so named from Baron Von Zois, its discoverer—gray, pearly, crystallized, and massive, exists in Monroe and Vernon; also in Wardsborough, Vermont, in deeply striated greenish gray prismatic crystals, sometimes a foot long, and an inch or more in width, usually imbedded in quartz.

“ *Laumonite* is found occupying thin seams in trap at East and West Rock, near New Haven;”—(Shepard;) abundant in Litchfield; color white and lustre pearly. Werner gave it its name from *Gillet Laumont* , who first observed it. If exposed to the air it soon loses its lustre and its solidity, and is reduced to a powder. Professor Silliman remarks, that “one

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specimen effloresced in his *hand* , and completely crumbled down.” I have lost several fine crystallized samples by neglect. The action of the air may easily be prevented by dipping the mineral in a solution of gum arabic, which will preserve it for many years.

Chabasie , in light gray crystals, sometimes brownish or yellowish, occurs in a gneiss stone quarry in Stonington; also at Deerfield, Massachusetts, in cavities of green stone, from which hundreds of specimens have been obtained. I have a splendid sample of wine-red chabasie from Nova Scotia.

Analcime , or cubizite, in trapezoidal crystals, East Haven; at Deerfield, Massachusetts, colors white, gray, and flesh-colored; associated with chalcedony, amethyst, chabasie, zeolite, and calcarilous spar.

Asbestus , ligniform, compact, or in the state of amianthus, is found in nearly all the serpentine rocks of New England; for examples: New Haven, New Milford,—Windham, and Kellyvale, Vermont. It occurs less frequently in various other rocks.

Amianthus , on Staten Island, New York—“It breaks up like flax, and may be spun and wove, without the aid of moisture. The fibres are from twelve to fifteen inches long, and as soft and flexible as the finest human hair.” I have found it in great perfection and abundance at Kellyvale and Mount Holly, Vermont. I have paper made of it. It was manufactured into cloth in old time. I need not tell *you* that it is incombustible; that the bodies of the dead were enclosed in it before they were burnt, that their ashes might be preserved; that the substance was used for wicks in the “perpetual lamps” of the ancient Temples, and is so used by the Greenlanders of the present time, or that it is manufactured, in our days, into purses, handkerchiefs, napkins, paper, and employed in making Scott's fire-proof chests.

Tremolite , in large white bladed crystals, penetrating quartz, in Wardsborough, Vt.; at Washington, Canaan, &c. Connecticut, in dolomite, and granular limestone.

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Sahlite , in the verd antique marble of New Haven and Milford; near Ticonderoga, New York, in pale green, eight-sided, imperfect prisms, in groups or clusters, which sometimes embrace adularia and graphite, and in which are thickly disseminated very beautiful chesnut and clove brown flattened crystals of silico-calcarious oxide 36 of titanium. The crystals of titanium often enter into the body, and form a part of the crystals of sahlite.

Apophyllite , or ichthyophthalmite, so called from its resemblance to a fish's eye, is said to have been found at Saybrook, and in the vicinity of Lake Champlain, N. Y.

Actynolite , in long, slender, four-sided prisms, much compressed, and presenting two very acute lateral angles, occurs in Windham, Vt., two miles south of the South Meeting-house. The crystals are all slightly striated, longitudinally, and very brittle. Their color is leek-green. They are, usually, straight, sometimes five or six inches long, and scattered, irregularly, but plentifully, in a lightcolored uncrystallized talc, in which are veins of very beautiful laminated talc. This locality was discovered by the writer many years ago, and he has never seen any other in which actynolite and talc existed in so great abundance, and of such surpassing beauty.

Sillimanite , a variety of bucholzite, in a vein of quartz, penetrating gneiss, in Saybrook; also, at Norwich and Groton.

Chesterfield, Mass., is Nature's cabinet, in which the kind dame has stowed away multitude of her most curious trinkets. Among them are kyanite—the best locality in the United States; garnet, of several varieties; cleavelandite, granular and crystallized; green tourmaline, the crystals of which usually enclose extremely delicate crystals of brilliant rubellite—reminding one of a beautiful woman, enfolding in her close embrace her beautiful infant; indicolite, or blue tourmaline; tremolite; emerald; irised quartz, red and yellow; beryl in granite, the crystals sometimes a foot in diameter; rose quartz; staurotide, abundant in mica slate; green feldspar, in crystalline masses; scapolite; fetid quartz; spodumene; prismatic mica, and the sulphuret of molybdena. Is not this a clever cabinet?

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Look at another in *Cumington* , in the same State, in which, besides most of those just enumerated, you will find steatite, or soapstone; blue quartz; green mica; chromate of iron; jasper; graphite; serpentine; schorl; silicate of manganese; fetid carbonate of lime; cumingtonite; carbonate of iron, in fine light-gray rhombic crystals, with curved surfaces; hyalite; red oxide of titanium; chalcedony, and black oxide of manganese.

Nuttallite , in slender crystals, Bolton, Massachusetts.

Pyrope , in rounded irregular masses, of a delicate poppy red color, Brimfield, Mass.

Brucite , (chondrodite, maclurite,) plentiful, in Bolton, Mass., in calcarious spar.

Corundum , in opaque, six-sided prisms in clusters; color, whitish green on the outside, darker in the interior, hard, scratches rock crystal; in Lynn, Mass., and in Litchfield, Connecticut.

Andalusite , (chiastolite, macle, hollow spar,) Westford, Sterling, and Lancaster, Mass.

Topaz , of gigantic size, occurs in Trumbull, Connecticut; the only locality in this country. The crystals are four or eight-sided prisms, some of them more than two inches in diameter, and nearly colorless.

This letter, Messrs. Editors, is already quite too long, and yet I am unwilling to write *finis* , before I have said two words about the overgrown and splendid *agates* , which Dr. Cooley, and others, have discovered in Deerfield, Massachusetts. One of them weighed twenty-three pounds; its longer diameter was nine inches, its shorter six inches; it was composed of distinct zones of greenish, and then reddish, chalcedony, with a light purple-colored amethystine geode in its centre. Were the extolled agates, on which the ancient artists executed so fine engravings, superior to this? Another, of smaller dimensions, was made up of zones of yellowish red carnelian and grayish white chalcedony, having its central part

occupied by limpid quartz. A third was *fortification* agate, and still more magnificent, but I have no room to describe it. I have done.

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LETTERS FROM THE WEST ADDRESSED TO THE AUTHOR'S WIFE, THEN IN BALTIMORE.

LETTER I.

Mode of travelling—Vineyard—An *old* taver-keeper—Gettysburg—Theological Seminary—College—Carriage-making—Augite—Volcanoes.

Reistertown, Md., May 16, 1837.

My Dear C: As you have consented to my absenting myself for several months from you, and from my beloved home. to ramble over the Western States, I deem your request reasonable, "That I should make you acquainted with my movememst, and with the most interesting objects and incidents I encounter in those boundless regions." I write you often, but do not expect too much. I shall give you only "first impressions," and these may be erroneous. With my old worn-out brush I shall paint things just as they appear to me. The picture will not dazzle; I have no skill in coloring. You will find in my hurried letters the plain, unadorned, every-day story of what I have seen with my own eyes, and heard with my own ears.

To study the geological features of the country, and investigate its mineral resources, is, you well know, one of the leading objects of the tour. As you are yourself a lover of this branch of natural science, you will, I am sure, the more readily pardon me for dwelling *too long*, in the estimation of some, on "earthly matters."

It was my intention to travel by the public conveyances—the 40 canals and steamboats, the stages and rail-road cars. But what could I learn of the out-door affairs of the broad

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world confined in this straight-jacket mode of journeying? Shut up in a long dark prison, and moved over the land with lightning speed, how could one gain a knowledge of the structure of the ball on which he was. running a John Gilpin race? It would be idle to attempt it. My first plan was given to the winds, and a new one adopted. I have purchased a strong horse, and a strong, but light, open wagon, and am accompanied by a pleasant, able-bodied nephew, who will aid and cheer me in my accidental pilgrimage.

We use the National road. It is Macadamized, chiefly with hornblende rock and greasy quartz. One vineyard we passed, of considerable extent, not far from Baltimore. The vines are planted, as they are in *some* parts of France, four or five feet apart, and supported by long poles, instead of stakes. I supposed, at first, it was a hop field. It looks somewhat like the vineyards, which we saw last year, in the south of France, and in certain portions of Italy, where the vines were trained on small trees, planted for the purpose, and sometimes conducted from tree to tree, forming rich festoons.

The village of Reistertown is of petty size, and the buildings inelegant. It has an academy of some note, whose preceptor is from New England. The tavern where we are to lodge, is a comfortable one, and is kept by a Mr. Forney, who has been its keeper forty-six year. A tavern-keeper *forty six years!* What a phenomenon! How many thousands of landlords, within half of that period, have fallen victims to the intoxicating cup. They Seldom last over ten years. He surely merits no feeble commendation for preserving so long himself and family from the legitimate effects of alcoholic poison.

Gettysburg.

We move tardily. Our distance from the Monumental city is only fifty-two miles The apple-trees seen to-day, are dressed-in their loveliest robes. The cherry blossoms are withered and gone. 41 Gettysburg is a sprightly, good looking town, holding two thousand inhabitants. It is built, principally on two streets, and the edifices are ornamental. From our hotel door, I see the Theological Seminary of the Lutheran church, standing on an

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elevated ridge. It has two professors, and a library of six thousand volumes. This is the seat of the Pennsylvania College. The building is handsomely proportioned, capacious and new. Its president is the Rev. Dr. Krauth. There are five professors, and more than a hundred students.

Gettysburg is celebrated for the manufacture of wheel carriages. I visited the principal establishment, and saw a multitude of vehicles, which had received the last touch of the workman's hand, and were ready for the market. More sumptuous, or better finished carriages, I venture to say, cannot be found in New York.

Chambersburg

This place has a good deal of the compactness, and bustle, and beauty too, of a Connecticut city. It is of about the size of Middletown; has eight churches, the majority of them German; a court house, a bank, and many manufactories, one for the making of straw paper, another for producing edge-tools.

But I must go back, and tell you what we saw on the road. A hundred rods from Gettysburg, we came to the rail-road, or rather, to the spot, where laborers are cutting a passage through a hill for the rail-road to run, which is to connect the Wrightsville and Gettysburg rail-road with the Chesapeake and Ohio Canal, at Williamsport. The hill is composed of red sandstone, both on its east and on its west side. This rock, being shelly, the men easily removed it with pickaxes and crowbars. In the middle of the hill rises a section of rock, three or four rods across, separating completely, the sandstone on the one side, from that on the other side, and thrown into a semi-crystalline stratification, as if it had once been made fluid by volcanic fire, and, in cooling, assumed this character. This substance resembles strongly, both in its texture and color, the basalt of the north of Ireland. Is it not probable 6 42 that this hill, and the adjacent mountain, were, some twenty thousand years gone past, volcanic, agitated, and tossed, and torn in pieces, by internal force, as Italy now is and has been, during three or four thousand years. The

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rocks we saw in ascending the mountain, eight miles this side of Gettysburg, are porous, and of a grayish hue, much like the old compact lava, which I have seen near the top of Mount Somma. In a fragment of one of them, I discovered small crystals of black augite, a circumstance, which strengthens my belief, that volcanoes, in times of yore, played their tricks in this part of the good William Penn's dominions. In passing over the south mountain, I met with epidote, prase, and ligniform asbestos.

This evening I have spent pleasantly, in the family of the Hon. Geo. Chambers, late member of Congress. Him I did not see. He is at Harrisburg, one of the convention, which is trying to quilt over a very good article, the old constitution of the Keystone State. Mrs. C. whom you saw last winter, at the Attorney General's party in Washington, was present, and her two daughters, a charming trio, whose interesting, animated conversation caused the hours to fly insensibly away. Ten o'clock came too early. I have just returned. My watch tells me that the night is half gone. You shall hear from me again shortly.

LETTER II.

Cove mountain—Temperance tavern—Simplicity—Vulgar *dejeuner* —Caoutchoue mantle Bedford—Junietta river—Napier—Sunday—Suffering pedestrians—Iron-hearted landlord—Patient wife—Alleghany mountain—Manner of clearing land—Alpine cold—Stoyestown—Climate changed.

We left our lodging at an early hour, and, after travelling ten or twelve miles on a smooth horizontal plain, where are a number of noble farms, we began to ascend Cove mountain, which is, I suppose, between two and three thousand feet in height. The road is a regular ascending plain, winding along the sides of the mountain, 43 resembling the threads of a screw, four miles mounting, and four descending. Our landscape from the summit was most enchanting—less variegated than that from Arthur's seat in Scotland—less checkered than that from the apex of Vesuvius—but embracing a vastly larger amount of area of hills and valleys and loftier mountains than either of these.

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The composition of Cove mountain, which is an arm of the Alleghany range, is somewhat singular. On the eastern slope, even to the highest point, few rocks are seen, except those of coarse gray sandstone. I expected to find granite, but saw none. On the opposite declivity, there is a larger variety, red and gray sand-stone, epidote, trap, ligniform asbestos, and occasionally a mass of white quartz.

I write you a few words at every halting place. We are now at M'Dowell's temperance tavern, in a corner of the township of St. Thomas. We stopped to get breakfast, and an excellent one we have had. How I love simplicity *in every thing*, in thought, in manners, in dress, in *cooking*! For our meal we have had beef steak, prepared in the best manner, and brought smoking hot on the table, potatoes, boiled and mealy, soft toast, light hot rolls and delicious coffee. Who, but a glutton, would desire more or better fare? At some country taverns you see the table groaning under such a burden of eatables—good, bad and indifferent—such an heterogeneous commixture, that one's stomach nauseates at the sight. All the articles which have been cooked, within the past month and not eaten, pies, cakes, sweet-meats, pickles, hams, &c. are brought forward, not because it is dreamed that they will be wanted, but to *show off*. It is the fruit of pride, the desire of the hostess to display her abundance before every new-comer. She fancies too, that the greater the number of dishes she offers, the more genteel she will be accounted. It is not so—she deceives herself. Who ever found such a medley—such a literal salmagundi—on the table of a truly *genteel* family? You remember the breakfast which was once provided for us, and others, at an inn in the interior of New Hampshire? Nineteen different sorts of food and drink were presented to constitute a single *déjeuner*. And who who of the party 44 did not class that house with the low and vulgar taverns. I wish all hostesses would learn, that the traveller craves but few eatables to satisfy the demands of hunger, but these should be good, well cooked and arranged neatly on the table. The charge for our two meals, with oats and hay for the horse, was only seventy-five cents.

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It has rained every day since we left home, but not much, till this morning. It is now wet and uncomfortable, but I do not suffer greatly. I have put on my surtout, placed over it the royal waterproof mantle, buttoned close around me, encircled my noble head with the caoutchouc diadem, and what have I to fear? There is no affinity between the falling water and my raiment. The drops strike upon it and rebound. What an admirable application of India rubber.

We are at Beamer's where we shall lodge, thirty-six miles from Chambersburg. There is no want of taverns in this region. Almost every other dwelling is a house of entertainment. We have met and passed to-day, wagons and stages innumerable. *Our* style of travelling is unknown, or unpractised on this route. We have not, as yet, seen a single individual journeying as we do. The *world* moves in stages, on horse-back and on foot.

Bedford, May 20.

We bade adieu to our host at 8 o'clock, A. M. clambered up a mountain, another spur of the Alleghany, two and a half miles, and then passed off, on a ridge of elevated land, eight or nine miles to the Junietta river, which we crossed on a substantial covered bridge. This is a beautiful stream, and about as wide as the old Tiber at Rome. The road runs along its bank, close under the mountain, trap rock being constantly in view, on one of its sides, and sometimes, even jutting over the pathway. We dine at an elegant and commodious hotel, kept by a Mr. Reynolds, brother to the gentleman of this name in New Orleans, with whom you are acquainted. He was gratified to learn who I was, and to hear from his two nephews, whom I had recently seen in the Scottish capital. Bedford is a handsome town, planted on high ground, and visible to 45 the approaching traveller far off. Near this place are the Bedford medicinal springs, discovered in 1804, whose waters have acquired considerable celebrity, for their curative qualities. They are, by, no means, so pleasant to the taste as those of Saratoga, N. Y.

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From Bedford we proceeded to this spot, Napier, a name, derived no doubt, originally, from that of the illustrious Scotchman Lord Napier, who conferred such manifold blessings on the human family, by the invention of logarithms, a name, which in this instance, designates a *township*, and not a village. There is no habitation here, except our wretched *auberge*—a single log-house situated under the brow of the *real* Alleghany. We have already made our way over several *branches* of this lofty mountain. Our next move will bring us to the summit of the *main stock*. But here we are destined to spend the Sabbath. To-morrow, should we escape being devoured in the night, will be, to us at least, a day of needed rest. A part of the country between Bedford and Napier—the distance is twelve miles—is composed of limestone. I examined a quarry, from which stones had been removed for the purpose of making lime, and discovered in it, many of the impressions and remains of oceanic shell fish.

Sunday Noon.

With my mind's eye, I can see you, at this moment, returning from the house of God—from the living sanctuary. *We* have no church to attend. No temple of the Highest is here—no gospel trumpet is sounded to arouse the sleeping offender—no sweet voice is heard, saying, “This is the way, walk ye in it.”

We have often had our tenderest feelings harrowed up, by a view of the miserable beings we have seen on the road—men, women and children—whom these disastrous times have thrown out of employment, and thus deprived them of the means of subsistence, and who are urging their way on foot, and starving, to the West. Two young men, from an eastern city—one a tanner and the other a printer—have just come up to the door of our tavern, in a condition, which would, I am sure, awaken your deepest sympathies. Their feet are swollen and bleeding. They have cut 46 holes in their shoes to ease their blisters. One walks with a single shoe; the other he could not wear, the foot was so sore. They are nearly moneyless—have had but one meal a day, since they commenced their journey,

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and that consisted of milk, bought by the quart, and bread, bought by the loaf. *O tempora!*
O mores!

The iron-hearted landlord, seeing them approach, and seat themselves on a rickety bench near the door, uttered a profane oath, and, in their hearing, exclaimed: "Here come more beggars. My house has been full of them for a month. I wont let them come in." "But," said I, "would the good Samaritan treat them so?" "I dont know what the Smaritan would do, or the Irishman, and I dont care, but I know they shant have any dinner here. They have no business to be trudging over the country without money. They have had great wages, and thrown away their money at theatres, in drinking, and gambling. They should have been more careful, and laid up something for a wet day. I dont pity them at all." I know they should, I replied, if it was in their power to do it. But why torture, with chiding words, these wretched young men, who are already sufficiently tortured? Why cast in their teeth their supposed sins, at the moment, when they are bleeding and starving? They are in a state of actual suffering. Give them relief, and then your admonition may be in place. It is your duty to furnish them food, and if you will not do it on your own account, do it at my expense." "Very well," said the old man, "they shall have dinner, if you will pay for it." I never disposed of a few shillings more cheerfully. When they had finished their dinner, they thanked me heartily, accepted some religious tracts, and limped on.

No person can remain in this house half a day, without perceiving that the heads of the family are connected by an unequal yoke—that the lamb is harnessed to the tiger, or the jackass—that the wife is not the *christian* husband's *companion* , but the Indian's squaw—performing all the menial and virile services of the establishment. I hate to see the *whole* of the business of the family done by *either* of the parties concerned. The empire should be divided, distinctly, and yet, the parts be harmoniously united. Each head 47 should reign, sole sovereign, and, at the same time, render to the other all the aid, and kind attentions in his power. What does our doughty lord do for his "weaker vessel?" Nothing. He *will* keep tavern, but the entire labor of the concern falls on her. Does an equestrian appear at the door? She, or her girl, and she has but one, must bring hay or oats for the horse.

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Does. he ask for drink? She gets it. Does he wish for breakfast? She prepares it. Poor woman! You have “to make brick without straw.” There is no wood at the house—not a single stick. Away she goes, sixty years old, clambering over the fences, to collect bark and broken wood, in the pastures and fields—just as the enslaved Israelites gathered stubble—to cook her meal. We should have had no dinner to-day, had not this bleached-locked, uncomplaining wife, carrying heaven on her countenance, gone to a rotten fence, sixty or seventy rods distant, and culled out her arms full of stick, with which she fed her fire. And where, in the meantime, was her *affectionate* spouse? In the bar room, sitting at his ease. Shame on the man, who thus treats his yoke-fellow.

Summit of the Alleghany, May 22.

Nine miles have brought us to this lofty, chill region, to a comfortable inn—the house of General Burns—not *Robert*, the poet, though the scenery around him is very poetic. The prospect of the lower lands, stretching off to an immense distance, and diversified with hills and valleys, and farms, is interesting and grand. The mountain is easy of ascent. The minerals we saw, in ascending, were chiefly chlorite and argillaceous slate.

How changed the climate! It is cold here as October. The apple trees are not in blossom, nor will they be within ten days. The forest is leafless as it is in gelid January. The buds have not begun sensibly to enlarge. The soil, though cold, furnishes rye, oats, and grass plentifully, but maize and wheat it refuses to yield. Cattle love this alpine air and food, and so do hogs. They exhibit no signs of starving. The porpus is not fatter. Sheep, too, delight to graze and gambol in these highland pastures. Their flesh is said to be delicious and their fleece—man, you know, struts in the 48 second hand dress of the sheep—is uncommonly fine and bulky. The wilderness is thick and heavy. The trees are oak, maple, beech, ash and hickory. The mode of clearing the land is not the safest or best. It is this: the large trees are girdled, the small ones and the brush-wood are cut and burnt; the ground is then ploughed, or harrowed, and sown. In two or three years, the standing trees, exposed to the destructive action of the atmosphere, become decayed skeletons, and

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threaten death to the animals, which feed, and the men, who labor under the shadow of their feeble and falling limbs. Occasionally they produce sad accidents

Stoyestown.

This little village, with four or five taverns, and a school-house, used also, as a church, is only nine miles from General Burns, and here we feel the grateful warmth of early summer, The difference is astonishing. It is like what we experience in descending from the Mer de Glace—from the frozen heights of Montavert—into the balmy air of the beautiful vale of Chamouni.

“Spring hangs her infant blossoms on the trees, Rock'd in the cradle of the western breeze.”

The forest are adorned with their cheering green foliage, and the meadows carpeted with luxuriant grass.

Kingston is the name of an old Forge, which is now defunct and falling into ruins. Its former owner and operator has turned publican and given us a good breakfast.

Turtle Creek.

We have travelled thirty miles to-day, over an undulating, and even hilly, but rich farming country. The fruit trees, though not numerous, promise a bountiful crop. I have never seen, within the same distance, so large a quantity of oak timber. The houses are constructed of hewed logs some are framed, and a few built of brick. Oak shingles exclusively are used. I have observed, in the course of the day, much limestone, and several pits of bituminous coal. The coal, however, was impure and nearly worthless. Weariness will drive us early to bed.

LETTER III.

Pittsburg—Smoke—Rort Pitt—Rapid settlement—Busy workshop—Penitentiary—Water Works—Churches—Professional Men—Coal Hill—Price of Coal—Iron Ore—Future prospects of Pittsburg.

Pittsburg, May 24.

We entered this city of smoke and mud, and ugly pavement, at nine this morning, under the peltings of a copious rain. The locality of the place was made known to us, at the distance of eight or ten miles—as Sheffield in England was—by its voluminous column of smoke, which mounted slowly, but majestically, into the regions of attenuated air. Pittsburg is better known in Europe than any other city in America, which stands far remote from the Atlantic coast. It is spoken of in Scotland, Ireland, England and France, as the “Birmingham of the West:” as the “Workshop of the United States.” It is, indeed, a vast and busy workshop. The sounds of the hammer, the file, and the saw, reach the ear from every quarter. The dazzling flames, generating steam, and fusing metals, encounter the eye from all points of the compass. The odor of the burning coal is offensive to me. A similar remark I once made to a Scotch gentleman in Glasgow. “I love it,” said he, “for if we had no smoke, we should have no city. Glasgow would not be here. It is this, which has built these monuments, these churches, these elegant squares, these fine houses.” With as much emphasis, might a dweller at Pittsburg say, “It is smoke, which has given us our prosperity, our fame, our wealth.”

The town is situated, like Lyons in France, on a tongue of land, formed by two rivers. That old, compact city—the second in the kingdom, in population and opulence—founded by the friend of Cicero and Horace, Lucius Muratius Plancus, is, you recollect, skirted on two sides by the Saône and the Rhone. *This* occupies tract of alluvial land, formed at the confluence of the two rivers, the Monongahela, larger than the Connecticut at Hartford, rushing in from the north-east, and the Alleghany, of nearly 7 50 equal volume, bringing its

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wave from the south-west, which, after their union, roll onward, resistless, under the name of the Ohio river.

Pittsburg was early selected, and inhabited by the French. It was a favorable situation for carrying on traffick with the children of the forest, and for a fort. It was at first called, as every schoolboy knows, Fort du Quesne. After Braddock's unfortunate defeat, the chances of war threw it into the hands of the English, at the time; when Pitt, the Elder, guided the destinies of that haughty nation. A new butcher house—I cannot give it a better name—for the slaughter of men, was erected soon after, under the management of Lord Stanwix. The expense of the erection drew from the British purse no less a sum than a million of dollars. It was styled Fort Pitt.

“The origin of the present town,” says Peck, “may be dated 1765. Its plan was enlarged, and re-surveyed in 1784, and then belonged to the Penn family, as a part of their hereditary manor. By them it was sold.” Its growth has been rapid. In the year 1800, its population amounted only to 1565. The estimated number, at the present time, including the suburbs, is over 30,000, of which, 17,000 have been added within the last five years. The principal suburbs are Alleghanytown, on the opposite side of the river of that name, and Birmingham, on the opposite side of the Monongahela. They are both noted manufacturing villages. Indeed the multitude of manufacturing establishments, which I have seen in the city, and its immediate neighborhood, astonishes me. There are twelve or fourteen founderies; several glass-houses, where the finest flint glass is made and ground; eight or nine cotton factories, with three hundred and sixty nine power looms; six or seven paper mills; thirty blacksmiths' shops; four gunsmiths' and nine silversmiths' shops; four breweries; four white lead manufactories, and six printing offices. More steam engines are made here, than in any other city in the Union. The value of the articles manufactured at Pittsburg in the single year 1831, was estimated at \$3,968,469. Since that period, nearly all the manufacturing 51 operations, have, I am informed, been extended, and many, new ones introduced.

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This city is not, like many others on the western waters, subject to fluvial inundations. The grounds on which the buildings stand, are sufficiently elevated above the ordinary level of the water, to ensure their security against the effect of its ravages.

A gentleman, to whom I had a letter of introduction, has politely conveyed me in his carriage to the most interesting points of view in the city, and its environs. I have taken a peep at the Penitentiary; a costly and not inelegant pile of building, and also, at the Theological Seminary of the Presbyterian denomination, both occupying eligible sites in Alleghanytown. The latter is seen to great advantage from the city side of the river, being placed on high land. I did not inspect the interior arrangements of either of them. I paid a similar token of regard to the Western University of Pennsylvania. Its outside appearance is very respectable, but not splendid. It is *in* the town, and its location is pleasant, being in the vicinity of the Monongahela.

The water-works, for the supply of the inhabitants with the most essential of liquids, attract much of my attention, and richly merit the attention of every traveller. The reservoir is on Grant's hill, near the cathedral. These works, says an elegant writer "are a splendid monument of municipal enterprise. The water is taken from the Alleghany river, by a pipe 15 inches in diameter, carried 2,439 feet, and 116 feet in elevation, to a reservoir capable of containing 1,000,000 of gallons. The water is raised by a steam engine of 84 horse-power, and will raise 1,500,000 gallons in twenty-four hours." From this elevation, the liquid is distributed in pipes over the entire city. There is nothing I so much delight to see in the young towns and villages, which are springing up in our country, as a full supply of water. The furnishing and holding of this indispensable article should never be committed to private individuals or to private companies. If nature has not brought it within the convenient reach of every citizen, the municipal authorities should do it, and defray the expense incurred, from the public chest. The water should then, under judicious regulations, be left to the common, gratuitous, unrestrained use of all. Instead of being paid for, by the gallon or pailful, as it is in some of the Atlantic cities, it should be free for

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every one, who uses it, as the air he breathes. Its copious use, instead of being restricted, should be encouraged, for the promotion of health, and cleanliness, and comfort.

In what more important or more honorable enterprise, could city governments be embarked? It is an enterprise, in which were exercised the skill and talents of some of the sagest and greatest men of antiquity. Proofs of this are on the page of history. Proofs are visible, too, in all the chief cities of the old world. Think of the superb marble fountains, which you saw in Paris, Rome and Florence—the ornaments and the boast of those illustrious capitals—the water gushing from them, in incessant torrents, fresh and health-giving, and free to all—to the *bourgeois* and the beggar, as to the pope, or the king.

“At what are you driving?” you will ask. “You are giving me a *dissertation* instead of *first impressions*.” It is true, and I will only add, that I heartily wish, that we had numerous imitations of the beautiful and invaluable fountain of the *Piazza del Popolo*, at Rome, in Baltimore, in Boston, in New York, and in all parts of our country.

The aqueduct of the Pennsylvania Canal over the Alleghany river is a great curiosity. At a distance, I took it for a covered bridge. It is built on arches, and is a handsome, substantial structure. The learned professions, one would think, must be fostered at Pittsburgh. The Divinity tree, the Medical tree, and the Law tree are all full of *Limbs*. There are, I am told, thirty lawyers here, twenty-nine or thirty physicians, and more than twenty clergymen, belonging to ten different denominations. No one, methinks, can absent himself from church for want of a speaker of his own persuasion. The citizens have the reputation of being a moral, church-going people, and I have witnessed nothing to mar that character. Several of the church edifices are stately and capacious, but have nothing finical, or gaudy, or costly, in their finish. The Cathedral is the most splendid.

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The lands on which the city looks out are hilly, and somewhat broken, but afford noble sites for country mansions, some of which are already erected, and others being built. One of the best I saw is owned, by an Episcopal clergyman.

The bituminous coal, which the hills in this neighborhood embosom, is exceedingly abundant. Thirty centuries will not, it is presumed, exhaust, nor materially diminish, the quantity. The principal source of this combustible is termed "Coal Hill." It is situated directly opposite to the city, on the west side of the Monongahela. The coal occurs in strata, varying from six inches to ten or twelve feet in thickness. It is connected, in nearly all the localities, which I have examined with a shalely argillaceous slate, with sandstone, and secondary limestone. It is frequently found deposited high up in the hill, two or three hundred feet above the river, and sometimes cropping out, at different altitudes, on its sides. I have not yet, in this quarter seen coal *brought up*, as it usually is in Europe, from pits sunk deep in the earth, by laborious and costly means. It is easily procured, being always *brought down* from higher lands. This difference in location renders the price of the combustible moderate. A respectable looking coal distributor, who was supplying the inhabitants in one of the streets, told me, that the price he obtained, the present season, varied from seven to ten cents a bushel, and that it cost him at the pit, when dug, from four to five cents a bushel. Iron ore, too, of a good quality, is plentiful in this part of Pennsylvania, and is extensively and profitably wrought.

The location of Pittsburgh is particularly fortunate in more respects than one. It will, beyond question, continue to be an important manufacturing town, as long as the stirring power, of her furnaces and her steam-engines shall exist in the hills, which surround her, and this, I fancy, will be about as long as the moon will endure. ' From its position, at the head of large steamboat, navigation, it is, already, a place of much commercial business, and is, I cannot doubt, destined at no far distant day, to become one of the principal emporiums of the West. It will be, to the regions of the vast valley of the Mississippi, what Tyre one was to countries 54 around the Mediterranean. It is true, there is, at present, a stoppage

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here, in some cases, and a retardation in all, of the wheels of business of all descriptions, as there is in every eastern city, in consequence of the universal derangement in the money-market. Everywhere people are complaining of the “hardness of the times”—of the scarcity of money. Everywhere, they are issuing bulls of condemnation against the hoary-headed ex-president, General Jackson, charging him with being the sole cause of all the evil under the pressure of which the country is now groaning and sweating. The malady has not reached its crisis. It is still increasing, and is felt as severely by those, who toil on the water, as by those, who smite the anvil, or dig the soil. Many capacious and elegant steamboats are lying idle, for want of freight—strung along the bank of the Monongahela, giving it a truly sombre aspect—and here they will probably remain during the summer. We counted twenty-seven in a single row.

LETTER IV.

Wretched turnpike—Half-way house—Canonsburg—Washington-National road, an honor to the Nation and a blessing to the country.

May 25

My Dear C. At 3 o'clock this afternoon, we left Pittsburg as we entered it—the heavens pouring their contents fast upon us—and crossed the long covered bridge, which bestrides the Monongahela. Our road is a turnpike. It ought to be good, as toll is demanded, but, *malheureusement*, it is, at the present time, the most *vilain*, which your imagination can picture. After working our way, inch by inch, through ‘lots’ of mud, and softened clay; after climbing hills, and crossing dells; our horse leg-weary and ourselves worn-up, by walking and wading and wallowing, we find ourselves stationary for the night, at a little tidy tavern, kept by a widowed lady—the half-way house between Pittsburg and Washington. We are now bound, you must know, for Wheeling 55 in Virginia. The distance, by land, one guide book tells us is sixty-one miles; another, fifty-five. Following the sinuous Ohio, it is ninety-two miles.

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It is cold this evening in Baltimore? We are seated before a bright sparkling fire, and it affords no slight comfort. Preparations, we see, are making for a first-rate supper. As soon as the operation of eating is over, we shall solicit an interview with old Morpheus. And so no more to-night.

Washington, May 26.

This is a sunny morning and we took it by the fore-lock, being in our tiny vehicle at six. On our route hither, we have passed through Canonsburg—a pleasant village—planted in a country, rough and broken, but rich in grass and cattle and wheat. In this village stands Jefferson College. It was founded in 1802. The college building has three stories and makes rather an imposing appearance. I had an introductory letter for the president, but did not allow myself time to deliver it. To-day we have had a transient view of a number of splendid farms, whose occupants seemed to have, clustered around them, all of earth's gifts, which man needs to render his brief existence a blessing. The minerals, which came under my notice, were chlorite, argillaceous slate, a gray earbonate of lime, interspersed with animal fossils, add bituminous coal, which exhibited itself in a multitude of places, even near the pathway.

We are now at Washington—not in the District of Columbia—we see no Capitol—no monument to the naval brave—no marble, fountain to gaze at—no White House to excite wonderment. But we see a college edifice, built of stone, a court house, banks, and other public and private structures, which would be no defasement to any Washington in the land. The town is finely situated, in the midst of a noble agricultural region, and comprises about three thousand souls.

It is delightful to be brought again on the National road. Travelling on it is indeed a pleasure, after our laborious trudging for the last twenty-four hours. This is, in fact, a magnificent highway, 56 and everywhere shows proof of having been constructed by the Nation's hand. It is well made. The roads of Scotland, overspread as they are, with

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pulverized greenstone, which, by cementing together, forms a surface, as hard, and as durable as the mountain granite, are not better. It is an honor to the government which formed it—a lasting memorial of its regard for its sovereign, the People. Happy would it be for the country had the whole of the surplus revenue, of which we lately boasted so loudly, been expended in constructing another similar road in some other direction across the entire Union.

LETTER V.

Wheeling—McCrary's Hotel—Manufactories—Coal—Port of Entry.

Wheeling, May 27.

The monarch of day was just stepping over his mid-way line, when we arrived at this river city. Wheeling does not come quit up to my expectation. I had heard many encomiums bestowed on, it, and perhaps expected too much. It is not wanting, however, in enterprise, nor, in ordinary times, in business, commercial or manufacturing, nor has it an unsightly or inconvenient location. It is placed along the eastern margin of the Ohio, and, pressed into close proximity with the water, by a sturdy range of abrupt hills, which lie directly back of it. Only a very narrow tract of alluvial ground is allowed for the site of the city. The town consists, principally, of two long streets, running parallel with the stream, which are intersected at right angles, by a number of shorter ones. On these streets are erected many spacious and lofty stores, ware-houses, manufactories, and some elegant private dwellings.

We drove to McCrary's hotel. It stands near the river, and in full view the steamboat landing. Little circumstances often decide our movements. I had known Mr. McCrary at the East. He long kept a public house in Howard street, Baltimore, and had 57 the reputation of keeping a good one. This character he still maintains, and merits. After undergoing a purification by water, and the highly necessary operation of the tonsor, I posted off to deliver my letters of introduction. The gentlemen, with whom they brought me acquainted,

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have done every thing in their power, to render my brief stay in the place, satisfactory and pleasant to me.

Wheeling owes, its existence to Fort Wheeling an establishment, founded in the early part of the American Revolutionary war. Necessity and perhaps convenience, accumulated a little population in its vicinity. The growth of the village was slow. As late as the year 1820, it embraced only 1567 inhabitants. The addition to its number, during the next ten years, was 3500. The present population of the city is estimated at about 9000. There are nine houses for religious worship, and several of the clergymen, who officiate in them, are said to be highly respectable for talents and piety. The majority the congregations are uncommonly large. In point of population, Wheeling is accounted the fourth town in Virginia, and, as a manufacturing town, it rank still higher. A catalogue of its manufactories, as they existed in 1835, is printed in Martin's, Gazetteer of Virginia, apart of which I shall take the liberty to transcribe. These establishments are "kept in motion by twenty-six steam-engines. The Wheeling iron works roll annually one thousand tons of iron. Besides these, there are four iron founderies, employing seventy hands; four establishments, for making steam-engines, also employing seventy hands; five glass-houses; two glass-cutting works, employing one hundred and ninety-three hands; three steam flour mills; two steam distilleries; two cotton factories; two paper mills; two steam saw mills; one copperas factory; two soap and tallow chandleries; two tobacco factories; ten bake houses; three printing offices and one book bindery." To these are added a host of operations of a minor sort;. such as tailors, wheelwrights, saddlers, silversmiths, painters, rope-makers, &c. &c. I cannot copy the entire list, but the sum of the matter is, "that the whole number of the establishments, for the manufacture of domestic goods, amounts to one hundred and thirteen, consuming, yearly, more than one million bushels of coal." 8 58 Tell me, does not Wheeling deserve to be styled *one* of the Birminghams of the West? One million bushels of coal! and, perhaps an equal quantity is consumed for household purposes. Whence comes it? A kind Providence has stacked away enough of it, within stone's throw of the fires, where it is wanted, to supply a thousand generations. The hills are full of it, and can

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never be emptied. It may always be had by the poor for the digging. "Delivered at the factories, the price varies from one to three cents a bushel." Who would desire fuel at a cheaper rate? In Washington, it cost me, last winter, you remember, thirty-four cents a bushel.

The National road, leading from Baltimore to St. Louis, passes through this city. Wheeling must, therefore, ever be one of the great thorough-fares for western travellers, and for western merchandise. Even now, the daily arrivals and departures of stages and boats create no inconsiderable activity and confusion. At the stage-houses quiet may be coveted, but is not always easily obtained. The multitude of river voyagers, who stop here, a longer or shorter time, as most of them do, is wonderfully large. The company, at our dinner-table to-day, consisted of seventy-four ladies and gentlemen, and the proprietor of the house informed me, that his customers, this season, are certainly not more than half as numerous, as they have been in past years "when times were good."

Are you aware, that the Roscoe, which brought us across the Atlantic, might have landed us here, without making her obeisance to the New York custom house? It is so. This is a port of entry. Merchandise and passengers may be conveyed from Spain, China, or the coral islands of the Pacific, directly to the wharves of this city. In the dog-days, the inhabitants, no doubt, put up fervent petitions, for "brass heavens" and low water, for in that case, Wheeling becomes the Ultima Thule of navigation for the larger steamboats. The small craft only can, then, make its way up-stream to Pittsburgh. The town, in these blessed seasons, is filled and thronged with strangers from the east and west, the north and south—the stores and streets and wharves are 59 crowded with goods, all waiting for further transportation. I can write no longer. Our carriage is at the door. Accept warmest good wishes from your best friend.

LETTER VI.

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Enter the state of Ohio—Ferryboat, propelled by the force of the current—An ingenious contrivance—St. Clairsville—Sunday—Rev. Mr. Laird—A faithful guide.

St. Clairsville, May 27.

At five o'clock, P. M., we left Virginia, and made our *debut* in the Commonwealth of Ohio. Opposite to Wheeling, the river is split into two distinct channels. A pretty, graceful island—not tiny, nor naked—has done it. Its materials, the flow of years—who can tell how many—or rather, the flow of waters, has brought down from the upper country, and deposited them here. Over this island, and these channels, all travellers from the East, who use the National Road, pass. There are two ferries; one over each channel. A flat bottom boat, moved by the power of the current, carried us across. This was the manner. A rope, connected with the boat, at one extremity, was fastened, at the other, to a tree, standing on the eastern bank of the river, forty or fifty rods above. The rope was kept, high and dry, by being fastened to the masts of three or four smaller boats, stationed at suitable distances, between the tree and the ferry boat. The boat was then placed, by means of a windlass in a direction oblique to the current, and, in consequence of the action of the two forces—the rope and the current—was carried rapidly to the opposite shore.

This is an ingenious as Well as a philosophical contrivance, and might, advantageously, be applied to the, like purpose, on other rivers, where more complicated and far more expensive means are adopted. It is a *new* invention here, said I, to my companion, a new application of water-power, and is, I have no doubt, the fruit of the workings of some western intellect. But it is not *new*, everywhere, although it may be entirely *original*. The same discovery, or invention, is sometimes made by two individuals, 60 hundreds, and even thousands of miles asunder, who have no correspondence with each other, and who are both equally entitled to the honor, due in the case. "It is new," said the boatman, who stood listening to my remarks, "I know it is; it was invented by a Mr.—," the name has escaped me. He deserves much credit, I replied, and I hope his ingenuity will be well rewarded. But the contrivance is, I assure you, an old one, on the other continent. It is

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employed in many places. Precisely the same method is practised in crossing the river Po, between Mantua and Modena in Italy, with this exception, that the stationary end of the rope is attached to a boat, moored in the river, instead of being fastened to a tree on its bank.

Our ride hither from Wheeling has been delightful. The distance is ten miles. The golden orb of day had lost his scalding beams, and, descending in glory from his lofty azure, gathering fresh and milder honors, as he approached his western plunge, displayed to us a magnificent spectacle. The sky was clear as the crystal lake. A refreshing breeze fanned us from the south-west. The fields spoke of bounteous harvests. The forests were clad in heir richest drapery, and the winged songsters poured forth their sweetest notes in fervent praise of Him who sits aloft, looking down well pleased with this charming portion of the works of his creative hand. The last glimmerings twilight were taking their departure from the earth, when we arrived at the door of our hotel. We shall remain where we are, till Monday. The clock has struck eleven. It is time to retire.

Sunday Morning.

On looking abroad, I perceive, that population around us must be small. There may be sixty or seventy houses, and perhaps more, within half a mile of our resting place, and five of these are churches. This fact betokens well for the good observance, of the Lord's day, although it argues a great diversity in the religious sentiments of the people. Quietness reigns within doors and abroad. It is the stillness of a Sabbath morning in a New England village. It is a glorious morning. Who can refrain from worshipping the Maker of it? The sun is mounting, majestically, the orient sky, bright and peaceful, as he once shone on the innocent groves of Paradise, when man knew nothing of sin, or pain nor dreamed of death.

Eight o'clock, P. M.

After breakfast, I launched forth to take a nearer view of men and things in St. Clairsville. The streets were alive with people, issuing from their dwellings, and coming in from the

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surrounding country. Some were going in one direction, and some in another. I followed in one of the trains, and soon found myself in a small unadorned, one story church, and in the midst of a respectable looking congregation. The clergyman had not arrived. In a few moments, a gentleman of middle age, plain in his manners and dress, tall and slender, entered, walked up the aisle, and seated himself in the desk. While he was engaged in looking out the lessons, and turning down leaves, the assembly was taciturn and noiseless as the tongue of the dead. All eyes were fastened on the minister. At length, he rose, and pronounced, with much solemnity, "The Lord is in his holy temple, let all the earth keep silence before him." The whole of the services were performed to my liking. The sermon did not, too much, "smell of oil." Its periods were not polished and burnished. They had nothing of the rotundity of Johnson, nor of the smoothness of Blair. But the sentiments, which they clothed—the precepts and exhortations—were evidently of celestial origin, and were delivered with an honest earnestness—an unction, which must have ensured them a ready admittance into the ears and hearts of the hearers. He was indeed, such a preacher as Cowper, and Paul, too, would approve;

"Simple, grace, sincere, In doctrine uncorrupt; in language plain, And plain in manner; decent, solemn, chaste, And natural in gesture; much impress'd Himself, as conscious of his awful charge, And anxious mainly, that the flock he feeds May feel it too; affectionate in look, And tender in address, as well becomes A messenger of grace to guilty men."

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I was unknown to every individual in the congregation. With the services I was exceedingly delighted, and When they were closed, I ventured to introduce myself to this under-shepherd of Christ's little flock. He seemed gratified that I did so, and walked with me to my lodgings, where I passed a pleasant half hour in his company. He was agreeable in his manners, intelligent, well-informed on all the subjects, which our conversation embraced, but was most interesting—most animated—when those were touched on, which are intimately connected with the honor of his Master, and the present and everlasting well-being of his fellow men. I heard him again in the afternoon, with no diminished satisfaction,

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and have taken tea with him, this evening, in the tranquil retirement of his charming family. At our parting, my heart asked, "Shall I ever meet this good man again?" "Yes," hope replied. We do not belong to the same denomination, but are we not of the *same church*. If so, then we shall have another—an endless interview—when these earthy tabernacles, in which the celestial spirit is now housed and hampered, shall be worn out and demolished. Heaven grant this happy consummation! "What is the name," you will ask, "of this Rev. gentleman, with whom you, are so highly pleased." It is Laird. He is acquainted, he informs me, with your favorite preacher, the Rev. Dr. H., and has been a resident, during several years, in the vicinity of Washington.

LETTER VII.

Face of the country—Productions—Italian cattle—Settlers from New England—Yankeeisms—No pine timber—Cambridge—Rich farmers—Domestic industry.

Middletown, May 29.

We have penetrated twenty-four miles farther in this late patrimony of the red man. The country is far from being a champain. It is uneven, ridgy—like the surface of the ocean, agitated by a moderate storm—but, by no means, mountainous. 63 All of it, which we have yet seen, is capable of cultivation, and when tilled, is very luxuriant, yielding, plentifully, wheat, rye, buckwheat, maize, oats, flax, and, indeed, every article, which the husbandman takes it into his head to ask of it. It is an excellent region for grazing. Horned cattle are numerous and of uncommon size. I should like to know to what magnitude the long white-horned oxen of Italy would attain in the luscious pastures of Ohio. Will no one make the experiment? I have seen lovers of fine cattle, from this State and Kentucky in Scotland, searching for good specimens to transfer to the new continent, for the purpose of improving their native breeds. Why have none of them crossed the Alps, and selected specimens from the land of the Cesars? Who has not seen, in Italian paintings of Italian rural scenery, representations of cattle, white as the new-fallen snow, and decorated with

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horns, twice as large as those, which belong to their cis-Atlantic fellows, and presenting curves, graceful as the bow, sun-stamped, on the cloud? These paintings convey to the mind of their admirers no fiction. They are representations of the truth, and nothing but the truth, as you and I can honestly bear witness. Did we see any object in Italy, more beautiful than the cattle, grazing on the arid, heaven-cursed plains of Campagna di Roma, or wild and playful, on the old volcanic hills of Tuscany.

We meet, daily, large droves of fat cattle, and of horses, destined to some of the eastern markets. No nobler steeds are to be found, than those reared in Ohio. They are larger than the horses produced in the Eastern States, but I have heard it remarked, that they are less hardy: and incapable of performing the same amount of labor. Our *Rosenante*, let me assure you, executes his task to admiration. He has grown swifter, and fatter, and handsomer, every day, since we commenced our journey. Our mode. of travelling, I prefer to all others. It is tardy; but for those, who are eager “to spy out the land,” and inspect all its bearings; it is the best in the world. We want no top to our vehicle. It is lighter, and our prospect of the country fuller, without one. As to your *older half*, he is completely shielded against the effects of the rainiest 64 weather; and if my young companion should get wet, it will do him no harm; it will, as his grandmother used to say, “only make him grow.”

This little village, Middletown, has nothing in it, which is very attractive to wayfarers. It may contain two or three hundred inhabitants. There are four or five stores, three taverns, and a number of mechanic's shops. We are at this moment equally distant from Wheeling and Zanesville. As we have now had rest, and a *c/ever* dinner, you must allow me to put up my quill, and move a-head.

Cambridge, 10 P. M.

We cast anchor in this snug harbor, an hour since, enveloped in Egyptian darkness. I shall say nothing of Cambridge from eyesight knowledge, for I can see nothing, and it is our intention to be on the wing in the morning, before cock crowing. Our landlord tells us, that

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this is a very prosperous town, pleasantly situated on the east side of Wills creek—that it is the seat of justice for Guernsey county, and that it comprises a court house, ten-stores, and more than a hundred dwelling houses.

A large proportion of the people of this state, with whom we have been brought in contact, or into companionship, came originally, from the north-eastern States. Frequently, however, we have fallen in with those, who emigrated from other sections of the Union; but we see enough, hourly, to remind us of the scenes and companions of our boyhood—of the manners, and customs, and language of the dwellers among the primitive mountains of the North. We have, here, Yankee wagons, Yankee pies, Yankee phraseology, Yankee every thing, except Yankee *tricks*. The hostess asks the traveller, who complains of being hungry, “Will you have a *bite* of something to eat?” “ *Daddy* ,” says a little boy, “may, I sleep! with Jim,” “Will you have a *bating* of hay for your horse,” enquires the inn-keeper. These, I believe, are all Yankeeisms. But the people, with whom we have intercourse, are agreeable, honest, and accommodating, and what more can a stranger expect or desire?

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Standing on the loftiest points of land we cross, Ohio appears to be dense, beautiful, boundless, unbroken wilderness, or broken by a few scattered openings, which seem far more sparse, than the men on a huge chess-board, and yet it is, already, one of the mightiest States, embraced in the National Confederacy, containing, probably, at the present moment not less than a million and a quarter of industrious, intelligent, enterprising inhabitants. I have never witnessed more heavily wooded forests. They are composed of trees of unusual magnitude—beech, sugar-maple, hickory, oak, ash, walnut, elm, poplar, and sycamore. I would give you the botanical names, but I am no lover of Latin, or rather of such barbarous Latin, as botany uses, and am little disposed to employ it, when I am writing to one, to whom the English terms will be more acceptable. The tree, called buck-eye, also flourishes here from which the inhabitants have acquired, I know not how, the nick-name of Buck-eyes, by which they are known throughout all the valley of the Mississippi. It appears to me, to be a kind of horse-chesnut. We have as yet seen no

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pine timber growing in Ohio, nor, indeed, evergreen trees of any description. The road we are still using is Uncle Sam's, or was made, by him, and deserves to be ranked among the best of the old gentleman's works.

The minerals, which I have noticed in this state, are not remarkably interesting. No rocks, have been observed, this side of Wheeling, except limestone, formed long since the earth was, and sandstone, from whose deposits a good deal of building stone is quarried. Many of the farm-houses are large and commodious, built, some of framed timber, some of sandstone, and some of brick. The plantations exhibit full proof, that their proprietors are in easy circumstances. Flourishing young orchards of apple, peach, pear, plum and cherry-trees are, every where, beginning to make their appearance. In several gardens, we saw raspberry and currant bushes, quince trees and strawberry vines. Tomatoes grow here luxuriantly, and all the other esculent vegetables, which are usually seen in the markets of Philadelphia and Baltimore. The fields yield flax in quantities sufficient for domestic purposes. Its 9 66 manufacture occupies the fair hands of many a female Buck-eye, shutting idleness and frivolity out-of-doors. The buzzing wheel is no rare spectacle here, even in the best room. The lovelier half of the farmer takes delight in aiding her lord. "She layeth her hands to the spindle, and her hands hold the distaff. She looketh well to the ways of her household, and eateth, not the bread of idleness."

"But hold!" you will exclaim, "how old fashioned you are!" I know it, my dear, but I promised to write you all I learned, and am now telling you, what *fools* the Ohio females are—how they condescend to imitate the vulgar, degrading, long since exploded usages of Patriarchal times—when people were ignorant, barbarous, and knew nothing of *woman's rights*. The female is, to be sure, too delicate to work, except it be to paint a flower, or make a shell basket. Her lily fingers, certainly, should never be soiled. She was made *for* man; that is, to dance with him, ride with him, walk with him, and glitter for him. But to manage the children—to direct the affairs of the kitchen—O how vulgar! how unbecoming!

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Why, who does not know, that this is the business of the servants? But enough of this. We hope to breakfast to-morrow morning in Zanesville.

LETTER VIII.

Zanesville—Population—Rev. Mr. S.—Judge Putnam—The Muskingum' river, a lovely stream—Falls—Water power—Public edifices—Mr. B.—Putnam Hill—Coal formations—Curious fossils—Cannel coal in Ohio—Buhrstone.

Zanesville, May 30.

This is a beautiful town, placed on a graceful curve in the Muskingum river, at the point, where the waters of the Licking are poured into it. The former stream is about as wide as the Connecticut at Deerfield. Zanesville is situated on its eastern margin, and the opposite banks are connected by a handsome, well constructed bridge. Another substantial bridge bestrides the Muskingum, 67 at the place, where the Licking has its disemboguing, forming for the citizens a convenient communication with the village of West Zanesville. The population of Zanesville is estimated at about 4000; and that of Putnam—a village on the opposite side of the Muskingum—at 1200. I cannot help believing, that the time is not far remote, when these two prosperous and rapidly enlarging places will be united, and form a single city. They are as much akin to each other, both in local position, and in interest, as London and Southwark.

I have taken tea this evening with, the Rev. Mr. S. an Episcopal clergyman, to whom brought a letter from the Rev. Mr. Laird. He is a gentleman, highly accomplished, both in mind and manners, possessing far more of the *suaviter in modo*, than falls to the lot of most of those, who “minister at the altar.” I love to see A clerical man—and, indeed, every good man—polite. I do not mean Chesterfieldian politeness, which is all hypocrisy, but Abrahamic.

“In my soul I loathe All affectation. 'Tis my perfect scorn.”

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That politeness, which adorns and dignifies the christian character, is not superficial and deceptive—it has its origin in the *heart*, and works itself out in all the business and deportment of the man Do you wish for an illustration? Read the twenty-third chapter of Genesis. What lachrymatory would hold half of the tears, which have been shed over that soul-affecting relation?

Mr. S. is a native of the Federal city, and has many acquaintances in Baltimore. In a walk to show me the “lions,” he conducted me through the village of Putnam, on the opposite side of the river, and made me known to some of its inhabitants, and, among the rest, to its patriarch—Judge Pumam—who is a son of General Rufus Putnam, from whom the village took its name. He is a relative—I believe—a nephew, of the brave general of the same name, whose wolf-daring exploit has been told the world over. If I read his countenance aright—I must confess, that I have little skill in physiognomy, and am but a weak believer in the doctrines of 68 its cousin, phrenology—the venerable judge owns a sound head and a benevolent heart. He is in easy circumstances, enjoying the “otium cum dignitate,” and maintains an excellent reputation, both as a man and as a christian. Most of the inhabitants of Putnam were originally from New England, and they are still characterized by the industry and sobriety, which are so generally practiced in the States, from which they emigrated.

The Muskingum is a lovely river—the largest and longest—lying entirely within the limits of the State. “It rolls its limpid waves,” says Jenkins, “over a sandy and pebbly bottom, variegated in the summer months with the open valves of thousands of red and white shells, scattered amongst the gravel, rivalling in beauty and richest tessellated pavements of the Romans. Its head branches water the most picturesque and romantic portions of the State; while south of Zanesville, it passes over inexhaustible beds of stone coal, and some of the richest deposits of mineral salt to be found in the valley of the Ohio. The aborigines of the west rightly named it the *Elk’s eye*, in token of its transparency and beauty.” The falls at this place have created a vast amount of water power, much of which this stiring

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people have already appropriated to the propelling of machinery, both manufacturing and mechanical. Zanesville has two flour mills, three woolen factories, three saw mills, two glass works, three iron founderies, and minor establishments of various kinds—more than I have time to enumerate, or you to read. Besides these, it has a commodious courthouse, two banks, an athenæum with a reading room, and a library of 9000 volumes, two academies, eight churches, forty stores, three printing offices, twelve lawyers, ten physicians, and ten clergymen. Do not all these bespeak a place of activity and thrift? and yet, forty winters have not passed, since the red man called it all his own. The first cabin was built in 1799.

A letter from a friend in the “Monumental city” brought me acquainted with Mr. B. whose kind attentions shown me, I shall not soon forget. The law is his profession, but he does not allow it to occupy all his passing hours. He is an indefatigable cultivator of geological science, and has been fortunate enough to develop 69 a number of valuable facts, relating to that important branch of knowledge. I begged him to give me some ocular insight of the structure of the country around Zanesville. He conducted me, immediately, to one of the coal formations, which are plentiful in this section of Ohio, viz: that of Putnam hill—a locality, as remarkable, perhaps, for its interesting fossil productions, as any on the continent. Do not suppose I am about to describe it. The work has been executed by an abler pen, that of the worthy geologist of Marietta, Dr. Hildreth. His account is more minute than I have leisure, or talent to make out, and so far as my brief examination of the case will authorize me judge, it is very accurate. It is inserted in the 29th volume of Siliman's Journal of Science, which I warmly recommend to your perusal.

An hour since, I had the pleasure of seeing in their natural position, many of the splendid fossils, pictured by Dr. H. The one with which I was most pleased, is very common in different parts of the hill. You will recognize it in the plate from my saying that its *form is circular*. Dr. Morton thinks it may be the asterophyllites of Sternberg. It was, beyond doubt, the blossom of some vegetable, which flourished long prior to the period, when the Noachian deluge wrapped its liquid winding sheet around this earthy ball,

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covering its loftiest mountains. You may fancy, if you choose, that this brilliant flower had a conspicuous place in the full and fragrant bouquets of some of the first daughters of men. And who can decide, that it was not the blossom of the very tree, whose sad fruit tempted our primitive mother to violate the mandate of Heaven, and thus open the flood-gates of woe on all her apostate children. This vegetable fossil is delicate as a girl's reputation. The slightest improper touch ruins it, irrevocably. In attempting to obtain and preserve two or three, I have destroyed hundreds, and yet I hope to be able to present to you one of them, at least, entire.

All the coal, I have met with in this region, is bituminous. You remember the large blocks of coal, two or three feet in diameter, which I obtained in England, and which are as incapable of soiling the fingers, as the purest marble. Those blocks are cannel coal—so called, says Kirwan, on account of its giving light, like a candle, 70 which, in the corrupted language used in the province where it was first discovered, is pronounced *cannel*. It is found at Wigan, and several other places in England. The article was, till recently, supposed to have no existence in the United States. But the mineralogists of Ohio have discovered this hidden treasure in the vicinity of Cambridge, and, also, on the banks of the Muskingum river. This I regard as an important discovery. Indeed, I look upon it as almost a certainty, that every valuable mineral, which has been brought to light, on the Eastern Continent, will, ere long, be found in our own country. Another substance, of calculable importance in domestic life, has been detected within ten or twelve miles of this town. You have not forgotten the immense quantities of *buhrstone*, both in its rough state, and wrought into millstones, which we saw near Epernay, in France, and particularly, in the filthy little village of La Ferte-sous Jouarre. Mr. B. assures me, that the same stone has been discovered here, of a quality equal, if not superior, to the best French buhr, and in sufficient abundance to satisfy the demand for this essential article, in all the regions of the West, for an indefinitely long period. If the man, “who makes two spires of grass grow, where one grew before,” is a public benefactor, to what amount of praise is he entitled, who has been the fortunate discoverer of this concealed source of wealth and

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happiness. I intended to tell you, earlier, that Zanesville took its name from Ebenezer Zane, a celebrated, hunter, to whom the land, on which the town stands, was granted by Congress, on condition, that he should open “a bridle track from Wheeling in Virginia to Mayville in Kentucky.” We have been here too long. We are now to quit the National road, and shape our course for Lancaster.

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LETTER IX.

Uniontown—Porter's Inn—The hostess and her daughter—Cheap living—Somerset—Hornstone, chalcedony, carnelian, jasper—Lancaster, pleasantly situated—Architectural adornments—Hills, differ from those of the North, less lofty, less rocky, more tillable, more fertile—Pine logs under ground—Succession of forest trees—Palm tree—Logan—Canal—Hon. T. Ewing—Carbonate of iron—Nelsonville—Sparse settlements—Population of Ohio a century hence—Indian mounds—Who made them?—Their form and object—Human skeletons.

Somerset, June 1.

Here is the half-way house between Zanesville and Lancaster. We bade adieu to the former town yesterday, toward nightfall, and proceeded ten miles, to Porter's tavern, Uniontown, where we had more comfortable, and indeed, more elegant accommodations, than we have any where found, since leaving Baltimore. The parlor was furnished with a variety of books, suited to the diversified taste of the travellers who visit it, and who desire to seek amusement or instruction from their pages. After supper, fruit of several kinds was placed before us. In the evening, the hostess, and her daughter—a comely, well dressed damsel, of eighteen or twenty, who had just returned, on horseback, from a wedding party—made their appearance in the parlor. They were very talkative and interesting, interrogating us, in relation to a multitude of matters and things in the Atlantic States, and rendering it manifest, by their correct phraseology, that they had enjoyed advantages if

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education, which do not fall to the lot of ordinary country inn-keepers. At length, the young lady, at the request of her mother, gave us a specimen of her, skill on the piano forte. The music, my companion thought, was angelic. He is, I acknowledge, a far more competent judge, in a matter of this sort, than myself, for I have no ear for music, and therefore am—Shakespeare being judge—made for a thief and a murderer. Even the music of the spheres, which, it is said, enraptured Pythagoras, would, I fancy, be to my leather ear, no better than that of the filing of a mill saw. I believe, however, that J. was more smitten by the *performer*, than the performance. We had supper of the best kind, lodging in elegant 72 beds, and horse keeping, besides the comforts and amusements I have mentioned, and what, think you, was the amount of our bill? One dollar and an eighth! Who would murmur at such a charge? Silver, in this quarter, is, I assure you, a *cash* article, and brings its full value.

For several days past, I have seen little else, in the mineral kingdom, but carbonate of lime, sandstone, chlorite, shale, argillaceous slate and bituminous coal. Half a mile before we reached this flourishing village, I found, by the way-side, gray and black hornstone, chalcedony, jasper, and carnelian. The road we are travelling is passable—not the best nor the worst.

Of Somerset I shall say nothing in the way of statistics. Its position is high, affording one a broad view of a noble agricultural region. Indeed, the country, which we have been passing through for many miles, seems to us to be one of the finest on earth, yielding every thing, except *poverty*, a *plant*, which Ohio, we imagine, does not cultivate. I must tell you, that the courts for Perry county are held here. The population of the village may be seven or eight hundred.

Lancaster.

This is decidedly the handsomest, but not the largest town we have entered in Ohio. It is spread over less surface than Zanesville, but the hands of its architects have been guided

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by a purer taste. Many of its private dwellings, and some of its public edifices, have been made to assume a style of uncommon chasteness and elegance. The village stands in a rich and beautiful valley, near the head waters of the Hocking, and is the seat of justice for Fairfield county. It appears to be place of considerable mercantile and mechanical business, notwithstanding the complaints of the inhabitants, that “they have never known such dull times.” It bears some resemblance to Springfield in Massachusetts, but is not ornamented with so noble a stream, as the Connecticut. Its inhabitants amount to upwards of 2000. It comprises, I am told, two hundred and seventy six private houses, ten wholesale stores, seven taverns, four churches, a court-house, a market and town house, 73 and a masonic hall. The plan of the town is regular, the streets, which are broad, and alleys all crossing each other at right angles.

I called this evening, as I had engaged to do, at the splendid mansion of the honorable Thomas Ewing, late Senator of the United States, but was so unfortunate as not to find him at home. His lady informed me, that he is at his salt-works, about thirty miles distant, which are but little out of our route to Athens, to which place we are directing our course.

The lands in this State, which have come under our inspection, are hilly—too hilly to suit my fancy—but not mountainous. They possess one characteristic, which makes them differ, immensely, from those which a New England eye is accustomed to view. Unlike those of Vermont, or Massachusetts, and more unlike those of New Hampshire, they are *all* susceptible of lucrative cultivation. There is no waste ground—no inaccessible heights—no rocks piled up to heaven, like those of the White mountains—no vast tracts, clothed with eternal sterility, like thousands of acres of Connecticut. We may find such hereafter. I only speak of what I have seen.

It is a singular fact, that, although no evergreen foliage darkens and variegates the forests of this region, yet pine knots, and even logs, are of no uncommon occurrence, a few feet below the surface. They are often met with in the neighborhood of Lancaster. This circumstances corroborates the opinion of certain naturalists, who hold that Madam Terra

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is strangely capricious, as well in her wild, as in her cultivated condition, cherishing one kind of grain, or one species of plant, for a number of years, and then, like an unnatural mother, refusing it nourishment, flings it off, and takes to her bosom another. Indeed, some suppose, that all trees have, in successive, and distant periods, occupied the same tract of country—that where the beech and the walnut now take firm root, the palm-tree once flourished, and gave to the natives of the wilderness its annual tribute of dates. And who, in these modern days, doubts it? I cannot. Impressions of the palm-leaf have been discovered in several of the Ohio coal fields. Whence came they? From the opposite side of the earth? This notion was current fifty years 10 74 ago. Now, none advocate it. The airy bubble is burst. I believe, that the palm-tree grew, and put forth its lovely foliage, scores of centuries gone by, on the very soil, beneath which, its ruins are now found.

If the palm tree grew here, why not the pine, at a far posterior date? Different kinds of *grains* require different soils. Some of the prairies will yield maize, but not wheat. Some vegetables exhaust the soil, others renew it. Forest trees, doubtless, do the same. Soils both natural and artificial, are ever changing, owing to causes too obvious to named. Why then should there not be a corresponding change in the productions, both of the field and the wilderness? I remember many years ago, to have heard a gentleman, who was then a member of Congress, assert, that his woodlands, at that time covered with hickory, birch and oak timber, were, in the boyhood of his grandfather, overspread with a dense growth of yellow pine and spruce. It was his confident belief, that the different species of trees appear alternately, or in succession, on the same territory; and that the reason why the phenomenon attracts so little regard, is owing to the brevity of human life—the continuance of each species being too long to allow the change to be noticed in a single age.

Logan, June 2.

We took our departure from Lancaster in the early part of the day and pursued our course along the margin of the murmuring Hocking, or, as it is more commonly called, the

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Hockhocking, near which a canal, to connect Lancaster and Athens with the Erie and Ohio canal, is being formed. The stream may be two or three hundred feet in width. The work is going forward briskly. Most of the way, the excavation is nearly effected. Sandstone, having saline taste, coal, shale, iron ore, and fossiliferous limestone have been thrown out by the excavators. These substance we had a fine opportunity to see and examine.

Half an hour before we reached Logan, we met Mr. Ewing, who was on his way homeward, a *chaval*. He returned with us to this place, which is eighteen miles from Lancaster, is now 75 employed in writing letters for me to the Rev. Dr. Wilson, president of Ohio University at Athens, and to Dr. Hildreth of Marietta. Mr. E. is a man of action, of tact, of enterprise. The National Senate has, for the present, lost his efficient aid, but the State, to which he belongs, will be a gainer by the energetic efforts he is making to bring to light, and render useful, some of her most valuable mineral products. He has recently, in company with two or three other gentlemen, made an exploration of the country for a considerable extent, and discovered, among other important minerals, a rich deposit of the carbonate of iron, to effect the working of which a company is shortly to be formed. He gave me a sample of the ore. It is good, and will, I judge from its appearance and weight, yield from 50 to 60 per cent. of metallic iron. You know, that this species is, by some, accounted more valuable than most other iron ores, because it can, by a single process, be converted into steel. Mr. E. after dining with us, galloped off for Lancaster. I have promised to pay a visit to his salt-works, to-morrow. Logan is a little scattered village—contains but a handful of inhabitants, situated one mile from the great falls on the Hockhocking, and was laid out in 1816.

Nelsonville.

This village, like Logan, is a small affair, holding, perhaps, a hundred souls. We are here housed for the night in an incommodious, one-story tavern, having only two or three very indifferent apartments. The inmates, however, are good natured and obliging, and every thing in this *petit établissement* wears the aspect of neatness—a property, which

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compensates for a thousand other deficiencies. We have travelled to-day thirty-one miles. The country passed over, although of a character the most auspicious imaginable for the cultivator, is but sparsely settled. It might be made to support a population, ten, if not twenty fold larger than it now has. In fact, some of the western Magi predict, that the entire state, a century hence, will comprise, at least, ten times its actual number of inhabitants. The prediction does not seem to me extravagant. Ohio will, in that case, have in it more than ten millions 76 of active, undying spirits. What a multitude! What an empire, within a vaster empire! But will not some wreakful, daring Nero, ere that period shall have elapsed, madly sever the silken cords, which now hold her linked in blessed union with the happy sisterhood? Heaven forbid it. May the motto always be appropriate, "E pluribus unum." The soil, in this quarter, is easily tillable, and exceedingly productive, but to strip it of its natural growth—its trees, multitudinous and of enormous magnitude—and prepare it for the plough, must be a Herculean labor.

We see novel objects every hours. This afternoon I have been interested, beyond measure, in my first view of the far-famed Indian mounds. Shall I call them *Indian*? They are certainly not of nature's building. No one, who has inspected them, but for monument, can hesitate to pronounce them the work of human hands—of human hands, too, which have been changed to dust, at an epoch long anterior to the birth of that race of Indians, who lately roamed, free as the bounding antelope, over the wilds of this delightful country, but who are now fast wasting away before the pestilential influence of the unfeeling, mammon-grasping white man.

The mounds! What was their origin? No tongue can tell. On this enigma, even Tradition is voiceless. I look upon all the hypotheses I have seen to account for these erections, as idle tales, as useless figments. The mounds, which we have examined, bear a strong resemblance to each other. They are, in form, cones, tolerably regular, whose axes vary from twelve to twenty-five feet in length, and the diameters of whose bases, are usually between three and five rods long. On some of them, trees two or three feet in diameter are growing, and thrifty. On one lies a log, a foot and a half in thickness, which, it is likely,

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had its origin there. Some of them are in the open fields and pastures, carpeted with grass, which the cattle were cropping. One of them stands a few feet from the highway, and not more than thirty or forty rods from our tavern, exhibiting a surface, bare of all vegetation.

What was their object? the resting place, nobody here doubts, of defunct; man—the crucible, in which the pride of some 77 of Adam's haughtiest sons is melted down—the workshop, in which one of the Almighty's noblest structures is taken in pieces, to be, hereafter, remodeled and rendered indestructible. A gentleman, whose word I regard as truth, informs me, that a number of these mounds have been opened, under his direction, and that, in all the cases, except one, human skeletons were discovered. On this head, there seems to be no uncertainty. The demonstration is ocular and conclusive. Do not understand me to say, that I think *all* these mounds were built for sepulchral purposes only. I believe no such thing. The ends they were designed to answer, were, probably, multifarious. When I shall have viewed them in all their extent, in the more Western States, I may ask your attention to the subject again. I must, however, remark, that all the mounds, which we have this day seen, appear to me to have been erected for tumuli alone.

Wait a moment. I will go again and look at the Golgotha, which is nearest to house. I have been. The pile I mounted, just as the gone-down sun was flinging his last topaz and sapphire beams on the farthest verge of the western sky. A solemn awe pervaded my bosom. I felt, as I did, when descending, by torch-light—when you would not venture to accompany me—into the dark and dismal theatre of Herculaneum, where so many thoughtless, pleasure-seeking mortals were, in an instant, ingulphed, by the flood of molten rock, which came, rushing down, with fearful speed, from the crater of the awfully sublime Vesuvius. I could not refrain from asking myself, Where am I? Over whose bones do these intruding, unhallowed feet tread? Those of Jews or Gentiles? Those of the red, or the white, or the black man? Those bloody, tyrant chieftains, or those of dastard, cringing slaves? No voice came up from the mute dead to solve the riddle, no nor ever will, till

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the archangel's trump shall wake to life the sleeping clay. Then, and not till then, will the history of these wonders of the West be revealed.

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LETTER X.

Coal abundant—Salt-works—Athens—Ohio University, the oldest in the Western States—Endowed by Congress—Trustees appointed by the Ohio Legislature—The author's notions about colleges—The Rev. President—College buildings, Apparatus, Library, Minerals—Athens, unlike its name-sake of old.

Athens, June 3.

The land, for a few miles before we arrived at this village is uninviting, and much less productive, than that, which we travelled over yesterday. Coal exists in all the hills. Sandstone is the most common rock, and the one in which nearly all the saline springs are found. We followed the course of the Hockhocking, in the vicinity of which, six miles from Athens, are situated Mr. Ewing's salt-works. The water is procured by boring to the depth of five hundred and forty-six feet. The well furnishes ten gallons a minute. The strength of the water, by the hydrometer, is ten per cent. Sixty-five or seventy gallons make one bushel of salt. It is a small establishment, in comparison with that at Syracuse in New York, or that at Porto Ferrajo in the island of Elba. A good article, however, is manufactured there, and the quantity made, judging from the number of barrels prepared to receive it, must be very considerable. The business is said to be lucrative. The evaporation is effected wholly by artificial heat. There are several other establishments for the making of salt within eight or ten miles of Athens. The road from Nelsonville is very indifferent. The distance is fourteen miles.

Athens is the seat of the oldest Collegiate Institution in Ohio, and, of course, the oldest of any in the Western States. Its charter was given to it by the Territorial Government, in the year 1802. Its present appellation is the "Ohio University." It derives its support,

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principally, from a donation of Congress, for its benefit, to the “Ohio Company,” of two townships of land, or 46,080 acres, the northern half of which is called Athens. The land, I am informed, was disposed of on conditions, which have proved very disadvantageous to the interest of the Seminary. Notwithstanding 79 the magnitude of the above-named donation, the whole annual income come of the College, arising from this source and from the tuition-fees, does not, I am assured, exceed \$4,500. There must, I opine, have been some sad mismanagement in relation to these lands, or the yearly revenue, from that quarter only, could not fall short of at least \$10,000. Perhaps the Trustees were hampered in their plans, or mis-directed by governmental legislation. The Board consists of twenty-four members, all appointed by the State Legislature. It may be a question, whether such an assemblage of men, influenced and moved, as it ever will be, till poor human nature is made over, by party feelings and party prejudices, is the most suitable body to elect the members of corporation, which, if it takes the noble stand, it ought to assume, will forever keep its doors closed and barred against the ingress of all party considerations, political, or religious. So far as my observation has extended, those seminaries have been the most prosperous and the most serviceable to the community, which have been least meddled with by “the powers that be.”

Was old Dartmouth, within whose walls I have whiled away the happiest portion of my life, benefited by the *transmutation*, which the Legislature of New Hampshire attempted to make it undergo? Its history answers, loudly, in the negative. Was the University of Yermont profited by having its trustees appointed by the Legislature, whose elections were usually the true weathercock of the political ascendencies? No one will affirm it. For more than twenty years, it only *vegetated*—merely retained the breath of life. It never *grew*, till the Legislature had the wisdom to allow its corporation to elect its own members, fill its own vacancies, and manage its own affairs, without their interference. It is now an honor to the state and to the country. Had Yale College always been subject to the whims, and under the control, of the legislature of Connecticut, would it, think you, hold the noble rank, which it now sustains and merits?

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I wish I was dictator in these matters. “I suppose so,” you will say. “Every man loves power. But what would you do?” Why, I would say to the *Sanhedrim* of Ohio, be sparing of your 80 charters for colleges and universities. Do not grant too many. Three or four, of the first orders, are amply enough for your State, or any other State in the Union. If you charter many, you do injury to all—you divide, too much, their means of usefulness—you fritter away their dignity—you convert them into mere academies. Academies are needful, indispensable; *they* should be numerous—one, at least, in each county. They should never be permitted to bestow on their pupils literary diplomas. But colleges, which are always authorized to confer public degrees, should be few, and their honors be difficult of acquisition. None should receive them, who had not clambered far up the hill of science—who had not ascended to the top of Parnassus only, but were far advanced on their way to the summit of the highest mount of science and of literature. They would then do credit to their country, to themselves, and to their Almæ Matres. Less parchment would be dealt out to “lettered dunces.”

“Are not chartered privileges often abused?” Most certainly. They have been abused, in all ages, and will ever continue to be, unless watched by eyes more wakeful than those of Argus. You are their constituted sentinels. It is your business to protect them from abuse, by proper enactments. You must retain the power to revoke the charters, whenever proof can be had, that they have been violated. You should require the officers of your colleges, under heavy penalties in case of failure, to render to you yearly reports of the state and condition of those institutions. This would be a mutual advantage. It would make you acquainted with their doings—their economy—their industry—their wants. On their part, it would be a stimulus to exertion—a constant memento, that they are, annually, “to give an account of their stewardship.” If you wish for an additional safeguard, you can have a small representation in each Board of Trustees. You can make the Governor, an *ex officio* member, or the Judges of the Supreme Court, or the Speaker of the House, or the President of the Senate, or all of them, if you deem it needful.

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“Should we not grant to our colleges pecuniary aid?” Yes, beyond doubt. You ought to do it for own credit. It has 81 ever been accounted an honor, as well as a duty, for legislators to foster the cause of education. You ought to do it, as the best means of preserving your “dear-bought rights,” civil, political and religious. You ought to do it from the regard you have for your children, your country, and posterity. When you give, make an absolute gift. Do not trammel your donation with conditions. It is often better not to give at all. But if you withhold your funds from a seminary, on which haggard want has laid his foul hand—a seminary, which is scattering its blessings around it, far and thick, and wide, you do more injury to yourselves, than you do to it. In that case, the tide of public feeling will flow in upon it. The sympathies of the community are of more avail in its behalf, than the patronage of the government. Its treasury will be supplied from the purses of individuals—the friends of learning, of piety, and of humanity. This aid will be more valuable than yours. It will be attended with the heart-felt good will, and prayers of its authors, and draw down a blessing from above. The benefit will be two-fold. It will not only supply its treasury, but, likewise, bring students to the seminary, perhaps down to the third and fourth generation.

A college, which has a well-framed charter; a self-constituted corporation of enlightened, conscientious, energetic men; a corps of officers, talented, harmonious and persevering, but wholly destitute of public funds, is, in my apprehension, much more likely to achieve great thing for the State and for the world, than one, whoso trustees are elected by a legislative body, influenced by every breeze of party politics, although it have an endowment equal to the wealth of Cræsus.

But where is my quill roving? I will stop its vagaries. Shut up in my chamber, solitary, the world excluded, I have spent this long Saturday evening in giving you some of my cogitations on the subject of education. It is a noble one. What would man be without letters? Look at the Hottentot. He is but a step above the orang-outang.

On my arrival, I hastened to deliver my letter to the Rev. Dr. Wilson. I found him at his own domicil, seated by the side of the 11 82 partner of his youth and of his frosty years.

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The reception I met with was most affectionate and patriarchal. His locks are white, as the paper on which I am writing. He must be in the neighborhood of four-score, and yet is sprightly and cheerful. He conducted me, at once, to the college, the chief object of my visit here. It stands near the centre of an open square, of several acres in area, on elevated grounds, commanding a full prospect of the village, of a broad rim of country environing it, and offering a good view, to a great distance, of the beautiful meanderings of the Hockhocking. There are three edifices—a central one, ninety feet long, and sixty wide, four stories in height, erected in 1817—and two wings, each sixty feet by forty, and three stories high. The Library is not large. It may contain between two and three thousand volumes. Among them are several first-rate works. No one, however, fixed my gaze so strongly as a copy of the Septuagint. I have never seen that venerated volume in more sumptuous trappings, except in a single instance, and that was in the Royal Library, collected by the Third George of England, and presented, by his successor, to the British Museum.

The chemical and philosophical apparatus is formed on a small scale, but is tolerably complete. The specimens of minerals, belonging to the seminary, are somewhat numerous, but in perfect disorder, owing to the circumstance that no one of the officers has made himself acquainted with the science of mineralogy. I have engaged to aid Professor Read, who occupies the chair of languages, and who appears to be a remarkably efficient officer, in bringing the specimens into some sort of systematic association. This “labor of love” will detain me here half a week. I shall pass the *day* in the college, and devote the *evening* to you. Besides the instructors I have named, there is a professor of mathematics and natural philosophy; a professor, who has charge of the preparatory departments the Rev. Mr. Andrews, formerly a clergyman in Alexandria, D. C., and one or two tutors. The number of students is between eighty and ninety. The young men appear to be older than the students generally are in the eastern colleges. The first graduate at this institution, and, of course, the first in the Western States, 83 was the honorable Thomas Ewing, late United States' Senator. This was a good beginning. May

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the Ohio College—for university, in the true meaning of the term, it is not—be instrumental in sending forth from her walls a multitude of such men.

This Athens has no strong points of resemblance to her elder sister, the city of Cecrops, in old Attica. She has not *her* brush, *her* chisel, *her* classic lore; neither has she *her* depraved morals, *her* idolatry, *her* refinement in corruption. The village, though circumscribed, has quite a picturesque appearance. It comprehends about a hundred houses, principally built of brick, and tenanted by eight hundred people. There are three physicians, four lawyers, and five clergymen; three taverns and one printing office. Here resides Colonel C. Morris, a member of Congress, who has, at home, where prophets are said to be without honor, the reputation of being a worthy citizen and a public spirited, honorable politician.

My lamp burns dim. May the Good Spirit watch over your slumbers and mine!

LETTER XI.

The Sabbath well kept—Sermon by the Rev. Dr. Wilson—Sudden death—Satin spar—Funeral—Tornado—Its effects.

Sunday Morning, June 4.

My Dear C. —If I am not deceived, the Lord's day is less desecrated in Ohio, than it is in Maryland or Virginia. I have, I acknowledge, seen but a small portion of the State, but from what I have seen, I am constrained to form this opinion. The hotel at which we passed the last Sabbath, was quiet as a private dwelling. There was no disturbance within or around it—no children playing in the streets—no loungers at the door—no noisy tiplers in the bar-room. Indeed, I know not that there was any bar-room. Taylor's hotel, in which we are now lodged, is of a similar character. Every thing is orderly and moral. The whole family is preparing to visit the sanctuary.—The hour has arrived. We shall accompany the household to church.

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Sunday Noon.

I resume my pen to say, that we have had an eloquent and powerful sermon from the Rev. President Wilson. His manner of preaching was easy, dignified and solemn. The sentiments he uttered seemed to be the natural emanations of a warm and benevolent heart, and must have struck home with energy to every feeling bosom. He told us of our final audit, of the retributions of eternity, of the joys of the upper Paradise, of the gnawing worm, which will, endlessly, prey on the incorrigibly guilty; and told it, too, as one should, who stands, as he does, on the outermost border of his sublunary being.—There is no religious service this afternoon. Dr. Wilson's preaching was gratuitous. The clergyman, who regularly officiates here—the Rev. Mr. Burton, a relative of the Rev. Dr. B. of Vermont—is out of town.

Monday, 9 o'clock, A. M.

We know not, truly, what a day, or an hour, may bring forth. While I was at work in the college with Professor Read, a messenger came in breathless, to inform him that his father-in-law had, that moment, fallen from his carriage, and required his immediate attendance. Half an hour is hardly gone past, and now the tolling bell is reminding us that the immortal spirit is on its upward flight. How sudden! Who can count on to-morrow?

A little before night-fall, we went to examine a long ridge of the carbonate of lime and sandstone, half a mile from the village. The rock is quarried for the purpose of furnishing stone for the building of houses and for other uses. We discovered, in veins, an inch or two in thickness, running through the sandstone, a considerable quantity of fibrous carbonate of lime, or satin spar, snow-white, and susceptible of a fine polish. This substance, you remember, is employed in Italy in forming the most delicate inlaid ornamental Work. And who can doubt but it will, at some future day, be applied to a similar purpose by skillful artists in the valley of the Ohio. I shall bring home a number of specimens of this mineral.

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The uplands in this vicinity are deemed of little value. Some of them are extremely unproductive—the least desirable, it is said, in the State. The *bottom* land, which I understand to mean the *alluvion*, is uncommonly exuberant. A farmer, who resides on the Hockhocking, assures me, that “his soil is twelve feet deep, and as rich as oil.”

Tuesday Evening.

Such a war among the elements, as has been maintained for the last hour and a half, it has seldom been my lot to witness. We were at church, attending the *funeral*. Dr. Wilson had offered an impressive prayer—the cold tenement of the departed spirit lay before him—the Rev. Mr. Burton had delivered an appropriate sermon—the solemn dirge had been sung—the benediction pronounced—the coffin removed to the yard in front of the church—the face of the dead uncovered—the relatives and friends had slowly approached, one by one, to take their last look, and the funeral procession had begun to form. While all this was going forward, the heavens had been gathering blackness. Now, the clouds, before peaceful, but frowning, became wild and angry, flitting with awful celerity to and fro—the lightning flashed from point to point athwart the sky—the thunder burst, and roared, and bellowed—the rain poured down in torrents—the fearful tornado came, with all its boisterous fury, to crash and destroy.

I need not tell you that the interment was deferred. The corpse was re-conveyed to the house of the deceased, and a part of the multitude followed it. Those, who could, flew to their habitations. Umbrellas were useless. I was thoroughly drenched before I reached my lodgings. The family were in a state of agitation and alarm. The brick hotel shook frightfully. A stage-coach, which stood in the barn-yard, was hurled into the street, made two somersets, and was dashed in pieces. Five beautiful trees, the ornament of the college common, which spreads itself out before us, we saw prostrated on the ground. What other damage has been done, we have not learned.—What an emblem of the power

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of the Almighty! Now, all is tranquil. The war is ended. The god of 86 day has retired, robed in majesty. The occident again exhibits its rouge.

Wednesday, June 7.

My promised work is not yet completed. The undertaking is greater than I anticipated. Specimens, gathered from old boxes, dusty shelves, and dark corners, are brushed up and presented for arrangement; and, among them, I find splendid minerals from Haddam, Chesterfield, New Fane, Franconia, and many other well-known New England localities. The collection will be quite respectable. I hope to finish the business to-morrow, in time to allow us to make some progress on our way to Marietta, from which we are distant forty-one miles. I shall not address you again from this place.

LETTER XII.

Rome—Influence of leading men, good and bad—Confusion of names—Thirty-five townships in Ohio, named Washington; more than thirty, Union; Eighteen, Franklin—Bluff—Wilderness—No streams or springs—View of the Ohio River—Changes in its banks—Grindstones—Marietta, the oldest settlement in the State—Point Harmar—Muskingum river—Want of servants—Situation of Marietta—Origin of the name—Character of the citizens—Dr. Hildreth, the geologist—Price of houses—Indian fortifications—Rev. Mr. B.—School for young ladies—Marietta College, without public patronage—Ship-building—Anecdote.

“The sun had lost his rage; his downward orb
Shot nothing forth, but animating warmth,
And vital lustre,”

when we bade adieu to Athens. Our course was still on the Hockhocking. Fifteen miles brought us to this place—Rome—not the “mistress of the world”—not the seat of his Holiness. We see no “Museo Capitolino”—no “Pantheon”—no “Arco di Tito”—no “Colosseo.” The room which we occupy, bears no striking similitude to the magnificent

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apartments in the “Hotel des Iles Britanniques.” 87 There is, in fact, no city here, nor village. It is a land of farmers, and contains, besides, here and there, a *whiskey-shop*.

Nineteen-twentieths of mankind, if not ninety-nine hundredths, are mere automatons, set in motion by the other twentieth, or the other hundredth. Who has not seen the verification of this remark at public meetings, and, particularly, in the State Legislatures? The members of these Legislatures often amount to four or five hundred; but who devises, shapes, and brings forward the business? Six or eight prominent individuals. The others can hold up their hands, or cry *aye* or *no*, as their leaders wink or frown. It is much the same in the Legislature of the Nation, except that the file-leaders may be somewhat more numerous, and, perhaps, somewhat more intellectual. Far more than a moiety of the members of the House of Representatives, and may I not say, of the Senate, too, are

“The slaves of party, and established mode, With pack-horse constancy they keep the road, Crooked or straight, through quags, or thorny dells, True to the jingling of their leaders' bells.”

The same thing is witnessed in smaller bodies—in less important communities. How momentous, then, that the men of talents, who are among the first settlers of a country, or who have the prime agency in the management of any great enterprise; men, who exercise an influence so potent, so pervading, so controlling, and so lasting, should be men of good morals, of sound principles, of unwarped integrity. These observations are but a *preface*—a mere *peg* to hang a story on, which was related to me, a short time since, by a very worthy gentleman, a member of Congress from the State of Ohio, and one who is well acquainted with the facts.

Among the early settlers of Rome—where I am now scribbling—there was, said my informant, a certain individual, a physician, who had an uncommon share of intellect, and who, by his persuasive fluency, acquired a complete control over the minds of 88 his fellow townsmen, leading them wherever he chose, as a boy leads his flock of sheep. This

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man was, or pretended to be, an atheist, and spared no pains in imbuing his associates with atheistical sentiments. He held meetings with them for this purpose on Sundays—he himself being the chief speaker, the arch-fiend's mouth-piece, and high priest—and when the assembly broke up, the people resorted to the taverns and ale-houses, where they spent the remainder of the day in drinking and carousing.

In a neighboring township, said my friend, there was a man of an opposite character, an emigrant from one of the Eastern States, who was, intellectually, elevated somewhat above the other settlers, by whom he was much respected. He was a man of unquestioned piety, and had been a deacon in a church. On a particular occasion he called the inhabitants together, and addressing them, said, “I believe religion is a good thing, and that none are losers who possess and practice it. Now, my friends, if you will agree to help me build a log school-house, which will answer, also, for a temporary church, I will engage to meet with you, and read to you the scriptures, and such sermons as I can get, till we are able to support a minister.” They all gave their hearty assent. A convenient house was shortly erected. Religious exercises were constantly had, and the ordinances of the Sabbath duly observed.

The same characters, I have been informed, which these leaders impressed on the inhabitants of their respective towns, are still maintained, and perfectly understood in all that part of the country. The people of the latter place constitute an honest, industrious, prosperous community, remarkable for their freedom from habits of drinking and profanity, and no less remarkable for their love of learning and good order. Those of the former are litigious to a proverb—always engaged in law-suits—always quarrelling—drinkers, Sabbath-breakers, profane, practising the whole catalogue of vices, and, as a reward for their mis-deeds, are often lodged in the prison or the penitentiary.—Who can calculate the amount of good, temporal and endless, effected by the one of these men? Who can estimate the magnitude of the evil which has resulted, 89 and which will hereafter flow, perhaps to the thousandth generation, from the influence and example of the other?

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What genius presided, think you, at the christening of the town-ships in this quarter? It must have been one, barren of resources—one little skilled in the manufacture of new names; by the turning, and twisting, and compounding the elementary characters of the “King's English.” Who would expect to find, in the single State of Ohio, *four* townships bearing the name of *Rome*? It is so. But this is nothing, in comparison with what I am about to tell you. There are *eighteen* townships, besides furnaces, mills, post offices, &c. named *Franklin*. Now, should the old gentleman come back, as he expressed half a wish to do, a century or two hence, how would he split his philosophical sides with laughing, when he became acquainted with this indiscreet token of his countrymen's gratitude! No less than *thirty-five* townships in this State, are known by the revered name of *Washington*. How social, loving, harmonious this people must be, who have *thirty* townships called *Union*, besides *Uniontowns*, *Union county*, and *Union village*? It seems to me, that the giving of the same name to so many different places, within so limited a territory, must be the source of numberless inconveniences. I will point out one or two of them.

You want to write to a friend in Rome, Ohio. He *may* get your letter. There is one chance for him in *four*. Suppose you write to one in Franklin, or Harrison, or Pike, or Union, or Washington. It will never reach him; or, if it does, it will be by the merest hap-hazard. There are twenty or thirty chances against it. To assure your letter any probability of coming into the hand of the one to whom it is addressed, you must give it a very particular *superscription*—you must imitate Haüy, in using distinctive characters. You must name, not only the township, where your friend resides, but describe it minutely—tell in what county it is situated, whether in the north, south, east, or west part of the State, what river runs through it, &c. &c. In fact, the case is somewhat like this. Suppose a family to be composed of twelve children—six sons, and six daughters—the sons all called *Ichabod*, and the daughters all called *Peggy*. Now, how can the mother speak intelligibly to others of her daughters, who all have the same name? She must designate them by some peculiar traits of body, or of mind, which they are known to possess—, she must employ distinctive characters. In relating their good or bad deeds, she must tell

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what *broad-shouldered* Peggy, or *red-haired* Peggy, or Peggy the *coquette* has done. So the father, in like manner, must make known the virtues, or the faults of his sons.—The embarrassment might have been avoided in a hundred ways. Why did not the good people take names for their townships from the trees of the forest, and call them Oaktown, Hickorytown, Palmtown, Chesnuttown; or, from the plants of the garden, or of the field, such as Strawberrytown, Plumtown, Carrottown, Rosetown; or, if they had craved more classical names, why did they not go for them to the poems of Homer, Virgil, and Ovid, or to the records of ancient history? In some such way, the evil, of which I have been speaking, might have been entirely excluded. It is a grave one. Strangers at a distance complain of it, and with reason.—The evening is far gone. I must hie to bed.

Marietta, June 9.

We left Rome this morning, soon after the day dawned upon us, fasting, and, after moving a-head a short distance, we parted from the Hockhocking, and our level road, and clambered up a high and steep bluff, whose surface formed an angle with the horizon of some forty or fifty degrees. Here was hard work for old Rosenante. Had the poor fellow been a Latinist, he would have exclaimed, snorting, “Hoc opus, hie labor est.” And yet he had nothing to drag up the ascent but his own *corpus*, and the little waggon. J. was charioteer. Free from care, I gave myself to an examination of what was around, above, and beneath me. Our clambering brought us upon the *highlands*, which extend to the Ohio river. From this point, our line of march lay, for eight or ten miles, through a native wilderness. No human habitation caught our roving gaze—not a trace of man's work was visible, except the zig-zag horse-path, which we were threading. We paused and listened, in vain, to hear the sound of the woodman's axe, or the noise of cattle, or wild beast, or bird. All was mute and dreary. It would have cheered us to hear the drumming of a solitary partridge, or to see even a snake stretched across our path. How dismal! thought we, to be *alone* in this wide world.

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The scanty soil of these lands, which are here called *Barrens* , supports a stinted growth of beech, oak, maple, and birch timber, but, is irrigated, so far as my eye could discover, by no running stream, or gushing spring. A large portion of this tract is, I understand, still in the market. It is offered in forty-acre lots, or in larger parcels. Let me tell you, that this forms a part of the vast territory, which the “Ohio Company” purchased of the Government of the United States; a territory which they had the right to *locate* —I use an Americanism because it is convenient—in any part of the then unentered, untouched, virgin lands in the whole State. How strange that they should have selected the most steril, and least valuable portion of Ohio. But this tract, uninviting and steril as it is, might, by labor and judicious husbandry, be converted, within a moderate period, into a good grain-growing country. Were it in New England, it would speedily be taken up, its timber be stripped off, and, by the operation of the plough, and the Plaister of Paris, would be made to render a good account of itself in its annual products.

Twenty-one miles before we reached this place, we caught a glance, through the brushwood, of the broad Ohio. It was some hundreds of feet below us, and yet not far distant. We had only to make our way down from the *Upland* , to be on its bank. This we did, by means of a serpentine, precipitous pathway, which conducted us, hungry and fatigued, to an excellent tavern, standing on the very margin of the stream. Here we had an unobstructed view of this invaluable river, many miles to the north; of the various craft floating on its waters; of the numerous changes in its bed, which the lapse of untold centuries has occasioned; of its ancient banks, bold, towering and rocky, all composed of sandstone and fossiliferous carbonate of lime; of an apparent wilderness lining either shore, and extending back beyond the eye's ken, sprinkled, here and there, with large plantations, extensive orchards, and rich 92 cultivated fields. The alluvial land, formed by the water in successive ages, is of very different extent in different places. In some, it reaches back a mile or more from the present channel; in others, it dwindles down to a narrow strip, or wholly disappears.—The landlord soon put our exhausted frames in a

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better condition, and in half an hour we were again in motion. Our road, which was now up-stream, was badly gullied, and the bridges shamefully out of repair.

The sandstone of this region is converted to many important purposes. I will mention but one of them. It is employed extensively for grindstones. The woodlands, near the road-side, were filled with stone-diggers, laboring with crowbars, chisels, and hammers, removing massy blocks from their native homes, and reducing them to the required size and rotund form. The number of grindstones, which we saw stacked up along the highway, seemed immense—enough, one would suppose, to satisfy the demand for this article throughout the entire valleys of the Ohio and the Mississippi.

Are you aware of the fact, that Marietta is the oldest town in Ohio? Its settlement was commenced in 1788. That year, eight families from New England planted themselves here, under the direction of General Rufus Putnam. Their first business was the erection of a rude fortification for their defence against the Indians. It was called Fort Harmer, in honor of its first commandant. It is at present called Point Harmer, and forms a part of Marietta—that part which we first entered—that part which lies south of the Muskingum. It is a pleasant village, composed of a hundred houses, and perhaps more, and some of them very good ones, a post office, a steam flour mill, built of stone, and four stories high. The Muskingum, that beautiful, limpid stream, of which I have before spoken, and which is navigable for large batteaux the distance of more than a hundred miles, here pours its silver wave into the more majestic Ohio, through a channel five or six hundred feet in width. A ferry-boat, propelled by the force of steam, bore us across it.

The hotel, at which I am writing, was recommended to us as the best in the town. It stands on the margin of the Ohio, and not 93 far from the mouth of the Muskingum. It is kept by a Mr. Lewis, who is very attentive to the calls of his customers, but is sadly in want of servants to aid him. Indeed, this is the common complaint, I understand, in all the western non-slave-holding States. Nearly all the people are land-owners, and few can be induced to act in the capacity of servants, unless extravagant wages are given. We have just dined.

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Twenty-four persons were seated at the table, and the only waiters were the landlord and a single female—probably his wife. This part of the town is low and level, and occasionally inundated by the overflowing of the rivers, to the no slight inconvenience of the inhabitants. From this point, as you retire from the water, the grounds rise, gradually, and gracefully, till you are brought on an elevated plain, from which you can survey the town, the rivers, the steamboats, and the surrounding country.

Marietta! What a sweet name! Whence comes it? It is, like the ladies' finest dress—a French article—of royal derivation. It was manufactured—I know not by what rule—from two words, which once belonged to one of the most splendid, and yet one of the most unfortunate personages who ever wore a diadem—Marie Antoinette, Queen of the Sixteenth Louis of France.

I admire the situation of this place, and the manner in which it is laid out. The streets are broad, the lots spacious—each one hundred and eighty feet long, and ninety wide—affording ample room for gardens, and shade trees, and flower walks. The houses are not crowded into close contact, as they are in Naples and Genoa. They stand at a respectable distance from each other, as they do in New Haven, in Connecticut.—Marietta eligible as her location is, has had a slow growth. Many of her younger sisters in Ohio have far outstripped her, in point of numbers and wealth, but none, it is believed, is ahead of her in the practice of industry; in the performance of moral and religious duties, and in the cultivation of the intellectual faculties. The place is said to be more prosperous this season, than it has been during a number of years. The present population is about fifteen hundred. There are five religious societies, all of different denominations. There are four edifices for public worship. The other public buildings are a court house, a 94 banking house, jail, market house, library building, female academy, and collegiate institute.

Shortly after dinner, I hastened to pay my respects to Dr. Hildreth, one of the most distinguished geological lights of the West. I found him in his garden, in the midst of a greater variety of horticultural, ornamental, and valuable plants, than I have ever seen

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assembled in any single private garden on this side of the Atlantic, which was not situated in the immediate vicinity of some of our larger cities. Dr. H. possesses one of the most desirable residences in the town, high, sightly, and surrounded by agreeable objects. Indeed, I am half inclined to purchase a situation here for myself, and come and pass the last of my days in Ohio. What say you to it? The price of real estate in Marietta is very moderate. A house, capacious and elegant enough to satisfy me, finely situated, and having all the accompaniments of out-houses, ornamental shade trees in front, and a large garden in the rear, filled with all that a reasonable heart could covet, may be had for four thousand dollars. This is no more than I gave for our little cottage in C street. It is true, we cannot here have quite so good a view of the Capitol of the Nation, as we have there, nor hear so much of the bloodless battles fought in it.

I was introduced into the study of Dr. Hildreth, where I had the pleasure of examining his cabinet of beautiful minerals. His collection is not very numerous, and yet it is sufficiently extensive for all useful purposes. Individual specimens are exceedingly splendid. The minerals are arranged in the most perfect order. I was much interested with some extraordinary geological specimens, which he had himself procured in different sections of this State.

I was next conducted, much to my satisfaction, to the Indian fortifications, which are in the immediate neighborhood of the town, and which are, it is believed, more extensively known than any similar curiosities in the State. They occupy a portion of the elevated plain, which I have already mentioned. These wonders—for such they will ever be accounted—were evidently erected for different purposes; not for cemeteries for the dead alone, but 95 for places of defence for the living, and, perhaps, also for consecrated grounds, where religious rites were customarily performed. I intended to send you a description of these impressive remembrancers of a race of men, long ago extinct, but I find I have no time to make it out. All I can do, at present, is to refer you to the first volume of the American Archeology, in which you will see, pictured, a very exact representation of these works.

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I feel quite at home at Marietta, although I have not been in the place twenty-four hours. The cause is this: I find here a number of old friends, with whom, in years gone by, I have passed many a delightful hour; friends whom I heartily love, and some of whom I did not ever expect again to see, in the flesh. Of this number are the Rev. Mr. B. and his lady, at whose house I am to take tea this evening. Mr. B. is a graduate of Middlebury College, in Vermont, and now minister of a Presbyterian church in Marietta. He is an ardent and able promoter of the interests of education.

10 O'CLOCK, P. M.

I have just returned from the tea-party, where I had the pleasure of meeting a small company of ladies and gentlemen, as intelligent, as well informed, and as agreeable as you often find among the most favored circles in the East. The state of society here is reported to be uncommonly good. I am led, from all I have seen, to give credence to the report.—I must not forget to inform you, that there is, in this town, a seminary for the education of young ladies, which has acquired a very high reputation, and was commenced, I believe, by the Rev. Mr. B.—a seminary, where not only the ordinary branches of knowledge are imparted, but where several of the profounder sciences are ably taught. There is, likewise, a school here for the instruction of boys, which is spoken of in terms of high commendation, and which usually numbers more than an hundred scholars.

We purpose to remain here but a few hours longer. Were our worthy friends, the Rev. President L. and lady, at home—they are on a visit to the land of their fathers, in New England—I should probably continue in Marietta another day. On the first descending boat, which makes its appearance, we shall take our passage for Cincinnati.

Late as the hour is, I must not omit to say five words about Marietta College. What! a college there! only forty miles from Athens? Yes, an infant yet—not four years old—but healthful and vigorous. The collegiate edifice occupies an eligible position, is

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seen to advantage from all quarters, and is an ornament to the town. The hotel-keeper kindly accompanied me to it, and to the work-shops connected with it, for you must know that this college is a manual labor institution. The building, constructed of brick, is seventy-five feet long, fifty in width, and four stories high, with a capacious basement. Every student is required, by the regulations of the seminary, to work, either on the farm belonging to the establishment, or in some of the shops, three hours each secular day. We saw two or three articles of cabinet work, manufactured by the scholars, which would be esteemed ornamental, even in the East Room of the President's palace at Washington. The instruments, used in chemistry and philosophy, are sufficiently numerous to enable the professors to make all the experiments, required in the illustration of their lectures. The cabinet of minerals is handsome, and comprehensive enough for all the purposes of instruction. It is the same which was recently owned by the Rev. T. A. Merrill of Middlebury, in Vermont. The library is large, considering the age of the seminary, and a gentleman who is well acquainted with it, assures me, that "in its philological department, it is superior to any library in the Western States."

After I returned to the hotel, I was favored with a call from two of the professors, who are interesting, well-informed young men, and who will, I cannot doubt, do honor to the responsible stations, which they respectively fill. There is no *senior* class. The college is not old enough. There will be one the next year. The whole number of young men, now members of the existing classes, or preparing to enter them, is about one hundred and thirty; more than half of whom are expected to become clergymen. The officers of the institution are the following: 97

Rev. Joel H. Lindsley, A. M. President.

Henry Smith, A. M. Professor of Languages.

D. Howe Allen, Professor of Mathematics.

Milo P. Jewett, A. M. Professor of Rhetoric and Oratory.

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Samuel Maxwell, A. M. Principal of the Preparatory Department.

Is this a State institution? It has a *charter* from the State legislature? And no pecuniary support? None. Can it flourish, moneyless, unfostered by the government? I think it can, and will. Assign your reasons. The dawn of the morrow would overtake me before I could give them all.

In the first place, Marietta is easier of access than Athens. It stands on the river—the great natural highway between several of the States. The young men, from vast tracts of country in Virginia, Pennsylvania, and Kentucky can come hither to obtain their education, more conveniently than they can go to any other place. The poor, as well as the rich, may come; for they can, if they are industrious, support themselves by their own manual efforts, and from this class proceed most of the distinguished men of our country. The field, you see, for the supply of students, is ample.

Secondly, the Corporation is an independent body, untrammelled by legislative enactments, and, so long as they fulfil the requisitions of their charter, irremovable from office by any foreign authority. They are responsible to no tribunal, except that of the Supreme, and that of public opinion. They must perceive that the honor, and the usefulness of the seminary depend on their judicious management, and they will feel it to be their duty to adopt such measures, as will merit and secure the approbation of that portion of the community, on which the institution must chiefly rely for its support. Their number is small. It consists of only nine individuals. And a small number of able, honest, conscientious men will always manage the affairs of a college, and the affairs of the nation, too, with more wisdom, and greater economy, than a large number.

Thirdly, the college is, I understand, the idol of, Marietta, and of the people around it, to a considerable distance. Every man believes that the value of his estate—that the facility of educating his children—that his privileges and enjoyments, social, literary and religious, are, in a great measure, dependent on the growth of the college. Hence, the

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readiness with which pecuniary sacrifices are made for the advancement of its prosperity. In the last "Report of the Trustees," which is now before me, it is stated, that the sum of \$10,000—the interest, of which is to constitute the salary of a professor—"was subscribed in, and around Marietta." A much larger amount, I am told, has been obtained, in the same manner, for the purchase of the college grounds, for the erection of its various buildings, and for the support of its president. So long as the people manifest such a spirit of loyalty and liberality for their Seminary, so long, rest assured, it will continue to flourish. But should any untoward event—dissension among, its trustees, or officers, or neglect of duty—ever alienate this kindly spirit, then you may look for the gradual downfall of the institution. Such a disastrous result, I do not, however, anticipate.

I have a few more, "last words." As an appendix to the above remarks, I send you an anecdote, which I copy from the Ohio Gazetteer—an *anecdote*, of tenfold more interest, than any thing original, which it is in my power to communicate. Thirty years since, this town, notwithstanding its remoteness from the sea-board, was celebrated as a place for ship-building. A considerable number of vessels, ships and brigs, were constructed, at the mouth of the Muskingum, and, feeling their way through the numberless meanderings of the Ohio, and the Mississippi, at length reached their home, the ocean. At that time, Marietta was a port of clearance, where regular papers were furnished for vessels, destined for foreign countries. This circumstance gave rise to a curious incident which occurred in the year 1806 or 7.

"A ship built at Marietta, cleared from that port, with a cargo of pork, flour, &c. for New Orleans. From thence, she sailed for England, with a load of cotton, and being chartered to take a cargo to St. Petersburg—the Americans being at that time the carriers for half of the world—reached that port in safety. Her papers being examined by the naval officer, and dating from the 99 port of Marietta, Ohio, she was seized upon, under the plea of their being a forgery, as no such port was known in the civilized world. With considerable difficulty, the captain procured a map of the United States, and, pointing with his finger to the mouth of the Mississippi, traced the course of that stream to the mouth of the Ohio.

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From thence, he lead the astonished and admiring naval officer, along the devious track of the latter river, to the port of Marietta, at the mouth of the Muskingum, from whence he had taken his departure. This explanation was entirely satisfactory, and the American was dismissed with every token of respect, and regard."

LETTER XIII.

Leave Marietta—Steamboat Hunter—Its construction—Blennerhasset Island—What a change!—Where is Blennerhasset?—Belpre—Fruit, a staple commodity—River scenery—Gambling—Coal—Curious mode of loading boats—Portsmouth—The Ohio Canal—First view of Kentucky—Maysville—Boat racing—Importance of the Ohio river.

Steamboat Hunter, June 10, 1837.

My hand is so tremulous, that I can hardly write legibly. It shakes as it did, when we were on board of the noble, but too gaudy "Phocion," ploughing the "blue waves" of the Mediterranean. The Hunter is still more agitated, as well as more noisy. It is a *high pressure* boat, as nearly all are, which move on the western waters. It arrived at half past eleven. At midnight we were on board, but a dense fog coming over us, we were obliged to remain at the wharf, till six this morning, when our downward voyage commenced. The boat is a good one. I like its arrangements better than I do those of the Chesapeake, or of the Hudson. It is more airy, better ventilated, and better lighted. The engines—and indeed the whole of the machinery—is below, occupying the front part of the lower deck—the after half of the same deck is filled with second-rate passengers, low Irishmen, 100 negroes, filth, whiskey and tobacco smoke. The cabins for ladies and gentlemen are *above*—so elevated that they often afford you a fine view of the country, through which you are passing. They are sufficiently spacious, kept in good order, and illuminated by means of two sets of windows, one above the other, so that each birth has its own window. Over these cabins is a high walk, or observatory, called the hurricane deck, which has no awning, and is but little frequented.

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Blennerhassett Island, 8 o'clock, A. M.

We are now moving past an island, more celebrated than any other, which divides the waters of this magnificent river. All eyes are turned towards it. There is not an individual among the passengers or crew, who is not gazing at it. The island is narrow, but long. The length may be a couple of miles, and its area three or four hundred acres. Fruit trees of various kinds we see on it, and cultivated grounds. Much of the interior is concealed from our view, by the forest trees and brushwood, which grow on the water's edge. The splendid dwelling of its former unfortunate proprietor is not to be seen. It was burned to the ground seventeen years ago. No vestige of it remains to designate its location, except a small part of an old chimney. Some of the beautiful shrubbery, which formerly bloomed here, and gave to the air its fragrance, still survives, but the island exhibits few of the rich adornments—few of the fascinating attractions—which it had, when the traitorous Aaron Burr first trod its hallowed soil. Where is Burr? Gone to his long home; gone to his last reckoning—to the bar of Impartial Justice. Where is the duped, ill-fated Blennerhassett? And where his beautiful, angelic wife—once the Calypso of the island, charming by her eloquent conversation, and the nymph-like gracefulness of her form and movements, all, who were partakers of the princely hospitalities of this open-hearted, opulent son of Erin? They are said to be both still in the land of the living, but in a state of absolute poverty, residing on a small island, near the western coast of France. 101 They have a son, report says, in the city of New York—a talented, dissipated young man—subsisting on means, obtained nobody knows where, or how.

What a sad reverse in this once happy household! Formerly the favorites of fortune, now the victims of want. Blennerhassett brought to the United States a large amount of money; much of which he expended in the purchase of land, in the erection of buildings, in the accumulation of a costly library, and expensive chemical and philosophical instruments; and much of it, some suppose, was loaned, on liberal terms, to individuals in the vicinity. A rumor is afloat, that several of the most thriving inhabitants of Marietta, and of its

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neighborhood, are now fattening on “borrowed capital,” which rightfully belongs to this ill-starred gentleman, and which they refuse to refund. This very day, I have seen in a New York newspaper, a charge of this description. Is this scandal? or is it truth? Does so foul a stigma rest on the reputation of the people of Ohio? I hope not. If but a single dollar is due to this generous hearted man, from any one here, it ought, at once, to be transmitted to him. It would be but justice, and might cheer him in the last hours of his mortal pilgrimage.

Opposite to this Island, on the Ohio side, is the township of Belpre—a corruption, I suppose, of the French term *Belle-prairie*, which signifies an extensive meadow, or a beautiful savanna. This place is remarkable for its noble farms, and its rich dairies. Vast quantities of cheese are made here, both for home consumption, and for exportation. Belpre is but a single year behind Marietta in its occupancy by the white man. It was settled in 1789; “the inhabitants resided, during the Indian war, in a garrison, or stockaded fort, called Farmers' Castle. The early settlers were, principally, composed of the disbanded officers of the revolution, and formed a community, which, for intelligence and bravery, were surpassed by none in the Union. These ancient worthies, amongst whom were several of the posterity of General Israel Putnam, are now nearly all of them descended to the tomb, but their children still inherit their intelligence, and their patriotism.”

I had forgotten to inform you, that Washington county, of which 102 Marietta is the capital, is an enormous peach and apple orchard, whose products, either in a fresh, or dried state, go to gratify the cravings of thousands of the inhabitants in the regions of the far west. The apple, especially, is a staple article—important to the grower, the trade, and the consumer. Hundreds of boat loads are purchased there, annually, floated down, by the current, to the mouth of the Ohio, then, aided by steamboat power, they move up the Mississippi, or Missouri, till a market for the commodity can be found. Sometimes, this fruit is conveyed up the Illinois river to Peoria, or even to Peru, and, thence transported across the country, in wagons, to Juliet and Chicago. This kind of commerce is often exceedingly lucrative. Many enterprising young men, whose capital was limited to two or three hundred dollars, have, by this traffick, made their fortunes. They are said to have doubled, and, in a few

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instances, to have tripled the amount of their property, in the brief space of four or five weeks.

The scenery, which accompanies us, on both sides of the river, is extremely cheering. Most of the land, appears to be of the best character, and heavily wooded. No mountains come within our sphere of vision. Large swells of surface, and sometimes hills of considerable height are seen. The few farm-houses, which we pass, are generally well-built and comfortable. The maize and wheat fields promise fair for an abundant harvest. The forests, which line the river, are composed of a great variety of trees, some of which have attained to an astonishing magnitude. The largest are the sycamore. The sugar-maple, the oak, the beech, and the walnut are the most common.

I have, within the last ten years, performed a good deal of locomotion in the eastern steamboats, and have no recollection of ever seeing, within that period, brandy, or gin, placed on the dinner table, for the use of the company. To-day, we have had before us decanters of both, but it gave me pleasure to observe, that out of the sixty or seventy persons, who surrounded the handsomely furnished table, only four or five partook of the noxious beverage. Does not this self-command, in the very face of temptation—this abstinence from the use of the intoxicating liquid—eulogize *les 103 voyageurs dans l'ouest*? There is a bar kept on the boat, however, to which the drinkers at table often resort, between meals.

Must I tell you that gambling is here practiced? So it is, you will say, more or less, in most parts of the country, and of the world, and where, with less restraint, than in the metropolis of the nation? It has been carried on, in the gentlemen's cabin, during the entire day. Three or four individuals only are handling the cards, but thirty are lookers on. The stakes are inconsiderable fifty cents, or a dollar—but the play can be called by no better name than gambling, and is attended by the legitimate accompaniments of gambling—profanity and dram-drinking.

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In travelling, by the ordinary conveyances from Baltimore to Boston, one can, it must be conceded, have some gratifications, of which a poor vagabond, in these recently reclaimed regions, must be deprived. You would say, were you here, that there is not sufficient attention paid to the *little* wants of the traveller—to the unessentials of living—not those, which nature creates, but those which long established custom has rendered almost indispensable. I will illustrate my meaning, by a single case, and say—

“Ab uno Disce onnes.”

In this land of cows, our boat's company to-day—ladies and gentlemen—are obliged to drink their tea and coffee without milk. Not because it is not abundant in the country, but because the captain deems it of little consequence, and, therefore, does not take the trouble to have it procured. Suppose that a party of ladies were breakfasting on board a steamboat, passing from New York to Hartford, and that the servant gave them no milk with their coffee; would not some Xantippe, of the tender sex, open such a battery, on the steward, as neither he, nor an Ajax, would be able to withstand? Omissions, like this, are far more common, and less thought of in the *new* States, than in the *old*.

I have observed, from the vessel, several deposits of bituminous coal, along the steep banks of the stream, many of which are not quarried. Large quantities, of the article, however, are dug, and 104 conveyed away in flat bottom boats, whose sides are raised, by means of planks, three or four feet, so as to render them capable of containing a number of tuns. In one place, not far from Gallipolis, the mode of loading was singular and ingenious.

The mouth of the pit is on a steep acclivity, eighty or a hundred feet above the river, and forty or fifty rods distant from it. The coal is let down, on a railway, to a point on the water, and directly over the boat, in a sort of car, holding ten or fifteen bushels. Two cars are fastened to the two extreme ends of a rope, which moves around some fixture at the top. By the weight of the descending loaded car, the other is drawn up. A man is stationed at

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the bottom of the declivity, who receives the descending car, knocks open its bottom, and the contents fall into the boat below. He then pulls a cord, which raises a signal to acquaint the person on the height, that he is prepared to have this car ascend, and the other come down. The boat is, in this manner, filled, in a very short time, with the mineral combustible. I conversed with one of the coal-diggers, who told me, that the vein, on which the men are now at work, is about five feet thick, and extends, nobody can say, to what distance. He believes, that the mine will not be exhausted, by any necessary digging, for the next hundred years. Ohio, I perceive, is furnished with an abundance of fuel, both of wood and fossil coal.

Sabbath Morning, June 11.

We halted, a few moments, about two o'clock this morning, at Portsmouth. The darkness, which was Egyptian, prevented me from seeing much of the town. From its position, it is, I am persuaded, destined to become one of the principal places in the State. It is situated at the mouth of the Scioto river, which is no trivial stream, being at this point, one hundred and fifty yards wide. Here, too, is the termination of the long canal, which connects the Ohio river with lake Erie. It must be a place of business—an important depot for the commodities, which pass through this channel, from the one part of the State to the opposite, for they must all here be *trans-boated*.

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This mornings, we have had our first view of some of the domains of the commonwealth of Kentucky. The land appears inviting, and many of the plantations have the aspect of neatness, and judicious cultivation. We are now opposite to Maysville, which is one of its oldest towns.—The Sabbath is better observed, by our companions, than I, yesterday, anticipated. Many of them are employed in reading religious, or literary books, or magazines. It is pleasant to see, here, a small library, in which are a number of useful popular works, on different subjects, purchased expressly for the use of the passengers. This is an example, worthy of being imitated by the proprietors of all the other

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steamboats. We have overtaken another boat, and, in conformity with a practice, which is too prevalent, on the eastern, as well as the western waters, they are now running a race, each employing every available means to outstrip the other. This dangerous and ridiculous contention is the cause of more than half of the accidents, which befall the steamboats of our country. The arm of the law, or what is better, public sentiment, ought to put a stop to it.

Our voyage to-day has been delightful. The temperature mild, the air pure and balmy, and the sky cloudless. The river itself is an object of grandeur—one of God's best gifts to man—a fruitful theme for profitable contemplation on this day of sacred rest. But few nobler channels of inland navigation does our ball of earth exhibit. Its length from Pittsburg to its junction with the Mississippi, is stated to be “nine hundred and eighty miles.” Its course, in some parts, is tediously tortuous. The breadth varies from four hundred to fourteen hundred yards. What an immense volume of water, ever moving onward, like the wheels of time, peaceful, as the full-orbed moon, rolling through the heavens, and still majestic—nowhere broken by rapids, except at Louisville, where a canal has been constructed, but is useless, when the water is high. We have passed, to-day, a number of islands, some of which are quite romantic—some clad in their native forest attire, and some subdued by the woodman and the plough. 14

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5 O'CLOCK P. M.

What splendid place, friend, is this, which we are coming to? I asked a by-stander. I have seen nothing in the West equal to it. “No, sir,” he answered, “nor will you, till you come back. It is the city of Cincinnati.” We approach the landing-place, but see there no boisterous crowd of porters and hackmen, as is usual, waiting our arrival. Where are the people? “O! they are,” said a good man, who stood near me, “they are, where they should be, and where we should be, at church, or in their houses.” This does not seem much like a Sabbath in Naples, where we saw forty or fifty parties of men, playing cards in the

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open streets, and none of the passing multitude appeared to regard the occurrence, as any thing extraordinary. It was the customary amusement of the people on the Lord's day. Heaven forbid, that Ohio should, in this respect, ever resemble Italy! The boat is now at rest, and my sheet is full.

LETTER XIV.

Cincinnati—Pearl street Hotel; not what it ought to be—Mr. S.—Rev. Dr. Beecher—Theological Seminary—Its Officers—Dr. Drake, a man of science and an author—Cincinnati artists—Mr. Powers, the sculptor—Museum—Mr. Stetson—Boston hospitality—Mechanic's Institute—Academy of Natural Science—President McGuffey—Cincinnati College—Medical College of Ohio—Manner of doing business in New York; the same in the West—Illustration—Description of the city; its origin; rapid growth; present population; prosperity; its resemblance to Genoa.

Pearl Street House, Sunday, 10 P. M.

As soon as we could get our horse and carriage disembarked, we mounted, and rode directly to this House, which, we were assured, is the best hotel in the city. If this be the best, Cincinnati is, in my humble opinion, much in want of a better public house—one, which shall correspond with the beauty, the opulence and the 107 prosperity of the town. The stranger, arriving here in a boat, and, surveying the rich exterior of the place, expects very naturally, to find in it first-rate accommodations—a Boston Tremont, or a New York Astor House; but the Pearl Street House, whether you regard the edifice itself, or its furniture, or the attendance of the servants, or the condition of the eating establishment, cannot be reckoned any thing more than an ordinary hotel. In Baltimore, or Philadelphia, it would be styled a very common public house, and, I presume, that ten, if not fifteen, might be found superior to it, in either of those cities. Such an establishment as the Hotel de York at Florence, or such as the Exchange Hotel in Baltimore, is required in Cincinnati.

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It would be an ornament and an honor to the city, which would derive no small pecuniary advantages from it.

Having been prevented from hearing preaching during the day, I was resolved to enjoy that privilege, if practicable, in the evening. On enquiry, I ascertained, that the Rev. Dr. Beecher, with whom I was formerly acquainted, and who is now connected with the Lane Theological Seminary, situated about two miles from the city, was to deliver a lecture this evening in his church, which is only a few rods from the hotel. "Mr. S—one of his elders," said the bar keeper, "has just gone past." Mr. S—? who is this Mr. S—? I asked. "He is a gentleman, who has long been a resident here, has accumulated, honorably, a large estate, and who is esteemed one of our first lawyers, and one of our best men." Is he a bachelor? "No, Sir; he did enjoy single blessedness for about forty-five years, but, a few months since, he wisely bartered it away for an amiable, opulent widow, with four children, two sons and two daughters." Is he from New England? "Yes; Connecticut is his native State." I knew him well, said I, a quarter of a century ago, and have not seen him since. I will go, instantly, in search of him. I found him in his palace-like dwelling—there are not many private houses in Boston more magnificent—engaged in the humble, and yet Christ-like employment of instructing his smaller children in the doctrines and duties of religion. The interview was, I believe, mutually, gratifying. I took tea with him and his accomplished lady, who seems every way 108 worthy of him. In the evening, we attended Dr. Beecher's church, and heard from this Rev. gentleman a very excellent discourse, which appeared to be entirely extemporaneous. After the exercises were concluded, I had the pleasure of renewing my acquaintance with Dr. Beecher, and with his talented daughter, Miss Catherine B. the authoress. To-morrow, I have engaged to visit them at their own dwelling near the "School of the Prophets."

June 12, Evening.

Tell Mrs. Mac L. that I have delivered her pretty, three-cornered, blue letter to Mrs. Stetson, with whose lady-like simplicity of manners, I was perfectly charmed. Her husband,

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she said, would call at my lodgings, in the course of two or three hours, for the purpose of carrying me out in his carriage to see the curiosities of Cincinnati.

We have had our excursion to the "Walnut Hills," on which are situated the Theological Seminary and the dwellings of its officers. The road thither is serpentine and hilly, but substantially made. In this *faubourg* of the city, the land appears not to have been long freed from its wilderness state. The size of the trees, still standing, bears testimony to the goodness of the soil. And if additional proof be demanded, it is afforded by the luxuriancy of the vegetation, both in the fields and gardens.

The houses of the professors and other officers stand on a street, or road, broad, straight, and formed on a nearly horizontal plain.

After passing two or three of these, your attention is drawn to the Seminary building, whose location is thirty or forty rods distant from the street, on the right. It makes a very respectable appearance, being four stories high, and one hundred feet in length. The chapel, seventy-five feet by fifty-five, has been made to assume the form, and style, of a Grecian temple. The Library comprises about four thousand volumes. Dr. Beecher's residence is beyond the Seminary, on the same side of the road. Him I did not see. Unexpected business had called him into the city. Mrs. B. and her son gave me a hearty welcome, and much information relative to the Institution. A farm, of one hundred and ten acres, is owned by the establishment, and the students are required to work on the farm, or at some mechanical business, three hours each day. Their present number is forty. The following gentlemen constitute the existing Faculty.

Rev. Lyman Beecher, D. D. Professor of Theology.

Rev. Baxter Dickinson, Professor of Sacred Rhetoric.

Rev. Thomas J. Biggs, Professor of Ecclesiastical History.

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Rev. Calvin E. Stowe, Professor of Biblical Literature.

Dr. Beecher, as I have already intimated, is pastor of a church in the city. The affairs of this valuable seminary—this monument of the christian munificence of the people of the East and of the West—are managed by a corporation consisting of twenty-five members.

Dined to-day at Dr. Drake's, in company with the Rev. Mr. McGuffy, president of Cincinnati college. Dr. D. is one of the earliest settlers in the city, and is, probably, better acquainted with its history, than any other individual. He is the author of an elaborate "Description of Cincinnati," and, also, of a number of excellent "Essays on the natural history of the country around it." He is distinguished as a physician, as a medical professor, and as a man of science.

This city is becoming famous as a nursery of the fine arts, or rather, of artists. A gentleman took me, this morning, to a small shop, where we saw three full-length statues, nearly completed, carved out of hard sandstone, representing three individuals, with whom my conductor was well acquainted. "They are" said he, "perfect likenesses." The workmanship appeared to me to be of an high order—not equal to that of the Apollo de Belvedere, or the Venus de Medicis, but not at all inferior to that, displayed by the untaught Scottish sculptor, Thom, in his universally admired statues of "Tam O'Shanter, Souter Jonny, and the Landlord and landlady"—a work, which will render the name of their author, as immortal as history. This artist, like Thom, has had no instruction, I am told, in the use of the chisel. His own native, unborrowed talent and taste led him to employ it. A few years, 110 spent in the studios of Rome, or Florence, would I think, make him one of the first sculptors of our age. His name is Clevenger. We did not see him, as I hoped to do. He was absent.

Mr. Powers, the gentleman, who attracted so much attention, last winter at Washington, by his skill in moulding likenesses, is from this town, though a native of Vermont. He is, you know, shortly to embark for Italy to perfect himself in his profession. I promised to

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write him a letter of introduction to our worthy friend, Mr. Cicognani, late American consul at Rome. This promise I have, this day, fulfilled, and left the letter, as he requested, with Mr. Dorfeuille, the proprietor of the "Western Museum." Mr. D. invited me to examine the vast assemblage of curiosities, which his own individual enterprise and perseverance had enabled him to form. Besides the thousand and one articles, which are common to all museums, I was pleased to find an extensive collection of Indian, and other curiosities, which have been obtained in the Western States, many of which are full of interest for the antiquary. I observed, too, a number of wax figures, of surpassing beauty, formed by the hand of the sculptor, Mr. Powers, who was employed, during two or three years, at this establishment.

10 O'CLOCK, P. M.

I have, this moment, returned home from Mr. Stetson's, where I passed the evening, pleasantly and profitably, in a small *conversazione* of ladies and gentlemen. There was no *badinage*, or frivolity. The conversation was chiefly of a literary cast—free, easy, entertaining, instructive, without restraint, and without formality. If this, thought I to myself, be a fair sample of the state of society here, it must have assumed a higher character than it has attained in many older portions of the Union. Indeed, if I may be allowed to judge from what I have myself witnessed, I must say, that Cincinnati, so far as relates to refinement of manners, intellectual culture, and hospitality to strangers, is more like Boston, than any other city in the United States, of which I have any personal knowledge. It resembles the metropolis of New England, too, in 111 another important particular, viz. the attention it pays to the education of its youth, and the diffusion of useful information among the different classes of its citizens.

Here I find a "Mechanic's Institute," with a competent philosophical apparatus, imparting scientific knowledge to the laboring portions of the community, by means of gratuitous lectures. Here is an "Academy of Natural Science," in whose Hall may be seen a good collection of plants, shells, minerals, fossils and birds. Here is a "Literary Institute,

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and College of Professional Teachers, whose object is to promote, by every laudable means, the spread of knowledge, in regard to education, by aiming at the elevation of teachers, who shall have adopted instruction as their regular profession.” Here is a “Young Men's Mercantile Library Association,” of a like description to those mercantile library associations, which have been productive of such incalculable benefits to young men in some of our larger eastern cities, and in Europe. The town is not deficient in humane, moral and charitable institutions—I cannot enumerate them all—but will mention only the “Eye Infirmary,” the “American Sunday School Union;” the “Young Men's Temperance Society;” the “Hibernian Society” and the “House of Employment of the Female Poor.”

The system of common school education, adopted and acted on, in this city, is worthy of the highest commendation, and ought to be imitated in every section of the country. The town is divided into wards, in which there were, last year, 5550 children, between the ages of six and sixteen, and only those, between these ages, are admitted into the public schools. Of these, about 3300 were proceeding through their regular course of instruction and discipline in these admirable seminaries. The whole number of public school edifices, decreed to be built, have not yet been erected. The actual number is eight or nine, and they are capacious and ornamental—well finished and well furnished. The schools, at present organized, occupy thirty commodious apartments, all alike in size, being each thirty-eight feet long and twenty-six feet wide. In these rooms, forty-three teachers, of different grades, and of both sexes, are constantly employed. The aggregate amount of their salaries 112 is \$14,000. The male principals are allowed \$500 a year, and their assistants \$300. The female principals have \$250 and their assistants \$200. The annual expense of educating each pupil is about eight dollars. These institutions have a board of “Trustees and Visitors,” for their regulation and management. There is, also, a board of “Examiners and Inspectors,” in which are to be found some of the most learned and most respectable of the citizens—men, who are qualified to examine the teachers, as well as their pupils. The Trustees hold meetings for the transaction of business, weekly; the

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Examiners, monthly. Once a year, a report of the condition of the schools is prepared, and presented to the city authorities and to the public.

Here, you perceive, the ordering and supervision of the education of the youth are regarded as a duty—and a momentous one it is—of the government. It was so regarded in ancient Greece, and from this circumstance half of her glory sprang. I admire the system adopted by the Cincinnatians. It is the proper mode of training up the rising race. They are liquidating the debt, which the present generation owes to the next, to their country and to God. They are doing what they can, to furnish the future stage with actors, enlightened, patriotic and virtuous—actors, who will play well their parts, when their fathers shall have gone down to their dark resting places in the cold tomb. But enough for to-night.

Pearl Street House, June, 13.

I have been honored with calls this morning from Dr. Drake, and President McGuffey, who is a gentleman of highly cultivated intellect, classical in his language, and ardently devoted to the cause of education.* I have since visited him at the Cincinnati College, where he was patiently employed in

* This gentleman, I understand, is now President of the Ohio University, at Athens. The Corporation of that Seminary, could not, in my opinion, have selected a better man to fill the station, vacated by the venerable Dr. Wilson.

“Teaching the young idea how to shoot.”

A small class of twelve or fifteen lads were seated before him, 113 thumbing, the leaves of their Virgils, and, occasionally, asking him the meaning of some of the old poet's dark expressions. I must remark, that this college was chartered, and on its feet, in 1819, but was short lived. After continuing its operations six or seven years, it died a natural death. In 1835, successful efforts were made to resuscitate it. The Medical and Law

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Departments, then added, are in a tolerably prosperous condition. Degrees have been conferred on students in both of these departments.

There is another institution here, at which the disciples of æsculapius congregate in greater numbers. It is styled the "Medical, College of Ohio." It owns and occupies a capacious building, has a library of 1700 well chosen volumes, a large chemical apparatus, and a good collection of anatomical preparations. The class of students, graduated last year, contained 127. This college has given to itself additional value, since the author was there, by numbering among its worthy professors, one of the best men in New England, and one of her most distinguished medical professors—Reuben D. Mussey, M. D. late professor of anatomy and surgery in Dartmouth college, in New Hampshire, and president of the Medical Society of that State.

Do you know, that there exists a marked and striking difference between the inhabitants of the city of New York, and those of every other city on our Atlantic coast? I have observed it, and so have hundreds of others. In Philadelphia, in Boston, in Baltimore, you see people walk deliberately, converse deliberately, transact business deliberately. You have seen the same in London, in Geneva, in Paris. But not so in the city of Gotham. There, everybody is in a hurry. The people do not *walk*—they *run*—as if escaping from the grasp of the sheriff. All their transactions are performed in haste. They make their fortunes, or lose them, *galloping*. The next time you pass through Wall street, in business hours, look at the jostling, racing multitude, and tell me, if what I have stated, is not the truth. The same sort of hurrying—the same headlong action—is seen, wherever I have yet travelled in these occidental regions. Every thing is done with celerity— 15 114 eating, walking, working—all is effectuated on the high pressure principle.

I will relate an incident by way of illustration. At the large hotels, which have, often, from fifty to an hundred boarders, the instant the bell rings, there is a rush of the multitude, like that of mighty waters, towards the table, and, if an unlucky wight happens, through age, or disease, or laziness—the worst of diseases—to be a moment too late, ten chances to

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one, he loses his seat, if not his meal. A little delay, in my chamber this morning, made me tardy. On entering the eating apartment, and looking eagerly all around the immense table, I found that there was not an inch of space left, where a poor, hungry expectant could wedge himself in. Fortunately for me, the evil was not without remedy. I posted off to the bar-keeper, and stated my case to him. He apologized, and immediately conducted me, into a private room, where were seated, around table, a small party of genteel people, partaking of their morning repast. Here, I had room enough, better company, and a very good breakfast. This custom of rushing to the table, like a hundred eminent hawks, pouncing on their prey. I cannot commend, whether it exists in the newer sections of the country, or in the older. It frequently brings the stranger into a very awkward predicament.

I can almost hear you say, "You appear to be charmed with Cincinnati; and why do you not send me a topographical description of the City?" I cannot do it. The attempt would fail. You would have nothing but a caricature, instead of a true picture. Besides, the place has too many beauties to be told in a single letter. To know, and rightly appreciate them, you must be present. I could tamely say, that it is situated on the north bank of the Ohio river, on two horizontal plains, of about four miles in area—the one raised fifty or sixty feet above the other—plains generated by the waters of the river, at eras, in the earth's history, far remote from each other: that the rough grounds, connecting these plains, are finely graded and built upon: that the lands back of the town are thrown into an infinite variety of forms—hills, dales, and extensive plains, presenting a landscape, as picturesque as the most fruitful 115 imagination could paint, spread over, in part, with rural cottages, elegant villas, and splendid gardens, and, in part, covered with, native forest trees, decorated with foliage remarkable for its richness and diversity.

I could tell you, that, half a century ago, this was the home of wolves, and bears, and wild cats—that it now contains a population of more than forty thousand souls, and is, in point of numbers, the sixth city in the Union. The first log cabin was erected in 1789, and, in the winter of the same year, the town was laid out, in the midst of a dark, dense wilderness, and the course of its streets marked on the trees. It was first called Losantiville, and

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afterwards changed to Cincinnati, by Arthur St. Clair, Governor of the then Territory. It now comprehends within its precincts, forty-five physicians, thirty-seven clergymen, and about an equal number of lawyers. It sends forth four newspapers, daily, one semi-weekly, and eight weekly. It has five banks, with an aggregate capital of \$5,600,000, besides several savings institutions, and fire insurance companies. It is the seat of important commercial and manufacturing operations. It is believed to be the largest pork market on the continent.

Perhaps I might give you a juster idea of the appearance of Cincinnati, by *comparison*. You cannot have forgotten how Genoa appeared to us, as seen from the point, where our steamboat anchored, or from that where the American ship of war, the Potomac, was stationed, farther out in the bay. The view was enrapturing. Our eyes were riveted to it. We had never seen its parallel. Rightly do the Italians, thought we, style Genoa. *La Superba*. Here, we could not help imagining, Vespasian took from nature the model of the Colosseum, which he commenced at Rome. The arena of *his*, often saturated with human blood, uselessly, wickedly shed, represents this narrow, flat plain, overspread with marble houses, and palaces, and churches, and all the pomp and bustle of a populous and magnificent town. The sloping galleries of the Roman Colosseum are a miniature representation of the lofty and ragged Appennine, which forms the semi-circular background of the city, and on which are perched 116 many a sumptuous mansion, many a terraced garden, many an humble cottage, and many a moss-clad ruin.

Were you here, I would conduct you across the Ohio river in the convenient steam ferry-boat, lead you to a spot, half a mile from the water's edge, and there ask you to take a deliberate survey of Cincinnati, and of the country back of it. You would, I think, at once say, that it bears no slight resemblance to the native city of Columbus. The high lands, here, though in some degree similar, are less lofty, less rocky, and exhibit fewer human habitations; but they are far richer, their forms vastly more variegated, and more beautiful. You do not, it is true, here see any thing like the towering light-house of Genoa, or the Cathedral of Lorenzo, or the "palazo ducale;" nor are you to expect it. Consider the difference in the ages of the two cities. The one is an infant at the breast. The other

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wears bleached locks. The one is not yet fifty years old. The other is two thousand. But old as she is, her population does not exceed 85,000. That of Cincinnati has already attained to near half of that number; and what will it be, two thousand years hence, if it continues to increase, as it has done, during the last quarter of a century? Let fancy stretch away into futurity and view her then. She will see a little World of men—not a New York—not a Glasgow—but a London. Since the year 1812, her population has received an augmentation of more than 26,000 souls. Should she continue to increase in the same ratio, for two thousand years to come, what will be her numbers? What hill will not then be covered with houses? What valley will not be crowded with them?

LETTER XV.

Steamboat—Horse-ducking—North Bend—General Harrison, a candidate for the Presidency—sketch of his life—First *coup d'état* of Indiana—Soil—No pine timber—Louisville—Plan of the city—cottage of Mr. S.—Fossils, coral, ammonite.

Steamboat Loyal Hanna, June 14.

We are now pushing off from the land, *pour voyager sur la rivière*. It was our intention to spend the last night on the water, but our horse could not be persuaded to embark. The bridge made for him to pass from *terra firma* to the vessel, was too narrow, and when he had proceeded half way over it, he became frightened, and fell off into the river. The fall, was eight or ten feet. This he did three times, and growing refractory, utterly refused to make a fourth attempt. We were obliged to take lodging in a very inferior tavern near the water, where we waited till nine this morning, for the arrival of another and better boat.

We are, at this moment, passing North Bend, sixteen miles below Cincinnati. Here is the residence of General William Henry Harrison, who is, you know, one of the candidates for the Presidential Chair—that station, to which so many ardently aspire, and at which but few are fortunate enough to arrive. I am under the yoke of bondage to no man, or party. I have nothing to ask of the “powers that be,” except it be the protection of life and property,

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to which all are entitled. I can, therefore, speak freely, and without, fear of consequences, to you, and to the world. I feel, it must be confessed, a deep interest in the result of this struggle. But the warmest wish of my heart is, that the best man in the nation may be placed at its head.

Is General Harrison, you will ask, qualified to perform the duties of that high office? I suppose he is, and so are twenty other individuals, whom I could name, some of whom are, perhaps, possessed of higher claims to it. Our country is not poverty stricken as to men of exalted character—of giant talent, in the various departments of life—men, who have long maintained a lofty rank in her national councils—men, too, who, with the skill of Fabius and the courage of Napoleon, have led her armies on, in the face of danger and death, to glorious victory—men, who, on the ocean wave, have won imperishable renown—men, whose names the pages of history will carry down, honored and revered, to the remotest age. A few of these men have acquired fame enough. Indeed, they could not, in my estimation, were they to obtain the presidency, or even sway a regal sceptre, add a single greener wreath to their crowns of unfading laurel.

But the President does not need talents of the first order. If he possess incorruptible integrity, moral and political, a sound judgment, 118 is conscious of his responsibility to Heaven, and to his fellow citizens, and has the wisdom to surround himself with an able cabinet, the destinies of the nation will be safe in his hands. Whose administration has been more judicious, or more popular, or more beneficial to the entire Union, than Mr. Monroe's, and what President has owned a less powerful intellect? He had honest intentions, extensive information of affairs at home and abroad, and the good fortune to secure, for his advisers, some of the most gifted statesmen in the country. They held the oars, and with vigor moved forward the boat, while he sat, calmly and wisely managing the helm. I would, by no means, intimate that General Harrison is deficient in mental powers. The history of his whole life evinces the reverse. I do not, you will say, know his history. I have heard persons extol Mr. Clay, and Mr. Webster, but have heard little said about General Harrison. I, too, have not an accurate knowledge of it. I am, however, acquainted

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with a number of facts, which belong to his biography, a few of which I shall take the liberty to embody in this letter.

He is, by birth, a Virginian, a son of one of the signers of the Declaration of Independence, and a Governor of that noble State, which has produced a Washington, a Jefferson, a Madison, a Monroe, and "last though not least," a Marshall. In his youth, he cultivated letters, and studied medicine, with that celebrated physician, Dr. Rush, of Philadelphia. On hearing of the horrid depredations, which the Indians were making on the pioneer inhabitants of the Northwestern frontiers, he abandoned his books, and at once hastened to their protection. His first rank, in the army, was that of ensign. His commission was given him by the "Father of his country," in 1791. In 1794 he was aid-de-camp to General Wayne. In the battle near the rapids of the Maumee, he signalized himself by his noble daring, for which he received the public thanks of his Commander-in-Chief. In 1793, he was employed in effecting the treaty of Greenville, which caused the termination of that Indian war. Shortly after, he was made Commandant of Fort Washington.

On resigning his first commission, he received the appointment of Secretary of the Northwestern Territory. The Governor being absent, the duties of both of these important offices devolved on the Secretary, and were discharged by him to the entire satisfaction of all persons concerned. In 1799, he was elected by the Legislature of that Territory a Delegate to Congress, where his influence and exertions procured the passage of several bills, whose operation has greatly hastened the settlement, and advanced the welfare of the Territory. Relinquishing his seat in Congress, he was appointed, by the President of the United States, Governor of Indiana, and Superintendent of Indian Affairs. These offices he administered during the period of twelve years, and in a manner so judicious, so upright, and so conciliatory, as to secure for him the strong personal attachment of all the old inhabitants of that State.

You have heard General Harrison called the "Hero of Tippecanoe." The title was well earned. He learned, in 1811, being then Governor of Indiana, that the Indians were

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resolved to violate the treaty which he had made with them, and that Tecumseh, the most crafty and fearless of Indian warriors, was engaged in uniting, for this purpose, all his red brethren between the northern lakes and Mexico. He informed the President of their perfidy. A regiment of the American army was immediately placed under his command. With these troops, and a few volunteers, the whole amounting to only eight hundred men, he marched, with Bonapartean speed, to Tippecanoe, where were twelve hundred Indian warriors already assembled. He called for their chiefs, and told them that their "Great Father" had not sent him to fight, but to settle their difficulties, and make peace. They promised to meet him in council the next day. From their behavior, he was led to conjecture that they designed to attack him that very night, and communicated his surmise to the officers. The troops were commanded to encamp in order of battle, to lie down with their clothes on, and their arms near them. His suspicion was well founded. In the gloom of a dark night, the attack was made, with horrid yellings, and the utmost fury. The combat continued two hours. The daylight revealed to the General the position of his foes. A determined, death-dealing charge now effected their defeat and total dispersion. This 120 is said to be the "first instance in which American troops have sustained themselves against a superior force of Indians in a night battle." On this occasion, General Harrison evinced the foresight and courage of a Wellington or a Hannibal. Does he not deserve the title of "Hero of Tippecanoe?" Other exploits of a similar character he has performed for the people of the West, and for his country, which I have no time to recount. This achievement executed, he returned to the discharge of his gubernatorial duties, but was again soon called into military service.

At a time when our land was invaded by foreign forces, and internal dissensions had spread a dark cloud over the prospects of our happy Republic, President Madison summoned Harrison to his aid, and appointed him a major-general in the army of the United States. With one thousand soldiers, he successfully defended Fort Meigs, in 1813, against quadruple that number, composed, in part, of British troops, who had fought like tigers on the Spanish peninsula, and in part of blood-thirsty Indians. He afterwards retook

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Detroit, scoured that part of the country, and, at length, captured the whole of the British and Indian army. Was he not brave? Ask the spirits of Proctor and Tecumseh. They knew his valor, and felt its effect. The war being closed, he resigned his commission, and retired to private life.

We next see him a member of the Legislature of Ohio—then a Representative in Congress—then a Senator of the United States, and then an ambassador from our Government to one of the South American Republics. Whose life has been filled with an ampler number of great and good deeds? He has held offices where the public funds, to a vast amount, have been confided to his individual, uninspected management, and where he might, had he been so disposed, have made himself, in opulence, a Girard' or an Astor. His inflexible integrity, together with his delicate sense of duty, have always kept him a poor man. He is now, Cincinnatus-like, occupied in cultivating a little farm on the margin of the Ohio, at North Bend. I cannot predict the result of the presidential canvass, but I can say, with great sincerity, that, in the hands of such a man as General Harrison, I should be willing to trust the destinies of our Republic.

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The country, seen from the river, on both sides, is comparatively level. There are no high hills; and yet the surface is gently rolling, and admirably adapted to convenient and easy cultivation. We pass, here and there, a precipitous bluff, whose water-worn front exhibits layers of fine-grained sandstone and fossiliferous limestone containing irregular fragments of dark-colored hornstone, here called flint. This kind of limestone constitutes, with a few exceptions, the foundation-rock, on which rest all the coal deposits of the Western States. Sandstone is almost invariably connected with it, and usually forms the covering of the coal strata. The character of the soil is made known by the towering forests, which it nurtures and supports. No trees of evergreen foliage meet our vision. I have not yet seen a pine tree growing in Ohio, but have been informed, that this kind of timber is found, in small quantities, in some parts of the State. The elm, the sugar maple, the buckeye, the

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poplar, and the beech, of enormous size, are laying their diversified shadows on the glassy mirror on which our steamer is rapidly driving ahead.

To-day, we had our first view of Indiana. The boat made a pause of half an hour at Laurenceburg, in that State. Notwithstanding the place is of very recent settlement, we saw in it a good-looking court-house and a number of respectable private dwellings and stores. Laborers were employed in constructing a railroad, which is, I believe, designed to connect that town with Cincinnati. Several teams were conveying sandstone, and secondary carbonate of lime, into the village, to be used in the erection of buildings. The Portland stone, of which the Cathedral of St. Paul's in London is constructed, does not furnish a superior building material. They both occur, I was told, in great abundance in the immediate vicinity of the town.

Friday, June 15.

On awaking this morning, I found our vessel stationary, and fastened to a wharf, amidst a multitude of others, at the city of Louisville, to which place she came at the dark, thief-favoring hour of midnight, I tumbled myself out of the berth "pretty considerable 16 122 quick,"—I borrow the language of Major Downing—and made my way to the Wall-street House. The full *day* had not come. Darkness still brooded over the land, although the rays of old Sol were manifestly playing their gambols in upper air, and attempting to drive gloomy night from the habitations of men. The doors of the hotel had just been flung open. The window shutters were still closed. A single servant, of the Ethiopian race, was seen loitering about from room to room, more asleep than awake. After much importunity, he assigned us a chamber, and placed our luggage in it.

Breakfast over, I issued forth, among a multitude of beings, all equally unknown to me, and I to them, in search of our worthy friend and relative, Mr. S., the attorney. My first attempt to discover him, or his law-shop—and the second—was unsuccessful. The third trial has brought me to his office, where my old pen is now galloping to make out for you another

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learned epistle. Here, your kind letter of 27th ult. was lying on the table, waiting my arrival. Thanks to you for it. To hear, at length, from one, so dear, fills my heart with gladness. The letter you sent to Cincinnati was not received. It will now go to Washington, maugre what I can do to prevent it, to edify the Postmaster General, or some of his subalterns. I, has made off with himself—horse, wagon and baggage—to see his cousin, at her residence in the country, called the Crow's Nest, five miles from town. I shall remain here, during the day, with Mr. S., and accompany him home in the evening.

Louisville is spread over a large area, and is inferior to no town on the river, in the amount of its commercial transactions. There is much regularity in the plan of the city. Streets, parallel with the river, are crossed by others, at right angles, commencing on the water's edge, and gradually ascending, on an inclined plain, to an horizontal one, on which some of them extend back to the distance of a mile, or more. The buildings are handsome, and many of them elegant, particularly the court house, theatre, and a number of the churches. The streets are straight, broad and airy, and, in some parts, ornamented with shade trees. The market is spacious and well supplied with good-looking eatables. This being 123 market-day, the place was crowded with buyers and sellers. I elbowed myself through the throng, and being by birth a yankee, thought myself privileged to ask questions. Peas are sold, shelled. The price was twelve and a half cents a quart. A common-sized pig, for roasting, sold for a dollar; beef-steak from six to eight cents a pound. The prices of articles here, so far as I could learn, are quite as low as they are in the Baltimore markets.

Crow's Nest, Jefferson. county, June 16.

Mrs. S. enjoys fine health, and appears as happy as a queen, and far happier, I trow, than most of her sex, who wear diadems. Their residence is an uncommonly pleasant one. The house is much like an English gentleman's country seat. It is large the ground, one story high, built in the true cottage style, and elegantly furnished. They have thirty acres of the best land the sun looks on, and are about to double the quantity by an additional purchase. Their little domain is partly native forest, partly cornfield partly set with peach, apple and

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plum trees, and partly over-spread with flowering plants and fragrant shrubbery. On the premises, you see all the variety of quadruped and biped animals and birds, which are usually found on a country gentleman's farm—cows, horses, hogs, sheep, fowls, doves, and to crown all, a beautiful deer, skipping about the pastures, and around the house, tame and playful, as a lady's lap-dog. I wish you and E. were here. You would, I imagine, have no desire to return. M. junior is a sprightly little chatterbox, handsome and intelligent. *Hard* as the *task* was, I have duly administered, both to the mother and her daughter, the two kisses, which you commissioned me to give them and even ventured to double the *dose*.

This evening I have been examining some curious fossils, which Mr. S. has had brought to the surface in digging a well. The articles were numerous. Among them I observed three distinct kinds of coral—a circumstance, which bears witness to the fact, that the ocean was once here—the *when* is still locked up in mystery's black chest—for coral is formed by insects, which, if I mistake not, always live and labor beneath the surface of salt water, 124 Besides the corals, I observed two varieties of ammonite, together with shells, petrified and unpetrified, innumerable. Fossil wood, too, was plentiful, but to what species it, belonged, I could not decide—it was so different from any which I had before seen. It occurs, lying side by side, or intermingled with the marine productions. Indeed, I cannot help remarking, that the whole of the Western country, through which I have yet travelled, is manifestly of secondary formation. Proofs of this stare the mineralogist in the face at every move he makes. One fact, which I observe here, and which struck me with peculiar force, when I was viewing the coal measures at Wheeling, in Virginia, Zanesville, and other places in Ohio, is extremely interesting. It is this, that all the fossils, which I have observed, have precisely the same forms, which they had, when living animals and vegetables; that the tenderest parts of the leaves and branches of plants still remain wholly unchanged in appearance, except in color. As the autumn leaves of of a thick wilderness, brought quietly to the ground, by gravitation, and pressed by the deep snows of a long winter, are found, in the spring, possessing, uninjured, all their delicate structure and

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configuration; so are found the palm leaf, leaf, and the leaves of unknown vegetables, in the shale rock, which covers most of the Western coal beds.

The fish, too, which are now enveloped in the limestone and sandstone rocks, exhibit the same shapes, which they had, when they were tranquilly resting in their own native element. As an infant is calmly put to sleep, by the lullaby of its mother or nurse, and then tenderly covered over with blankets, so the fish seem to have been lulled into their death-sleep by the song of some antediluvian siren, and, then gently, enclosed in their stony sarcophagi, to be kept for the study and admiration of our own, and after ages. Now from all this, what inference is deducible? Why, that these organized bodies were entombed without violence—that the ocean, which then overspread these vast regions, must, have held much earthy matter in suspension, and that it must, at the period when this earthy matter was deposited, to intermingle and combine with these products of the animal and vegetable kingdoms, have been 125 in a state of comparative quiescence. What other inference can be drawn? Had it been otherwise—had the waters been in wild commotion—had they forcibly swept away sand hills, and massy rocks, and huge forests, and brought them into tumultuous association with the inhabitants of the mighty deep, should we see such strong indications, as we now have, of the peace formation of these secondary rocks? The thing is impossible. The cane stock, instead of laying straight in the limestone or shale, would have been bent, or broken in pieces. The fish would have been contorted, or its parts dissevered, a head here, and a spinal bone there. The leaves and branches of vegetables would have been torn into atoms, and their fragments scattered hither and thither. In some places, no doubt, in these occidental regions, proofs may be found of chaotic disorder in the original commingling of the products of earth and ocean, but I have witnessed none.

Sunday Morning, June 18.

The forenoon of this day I shall pass at the Crow's Nest. In the evening I am to go to the city, in company with Mrs. S., to hear a discourse from the Reverend Mr. Humphrey—son

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of the Reverend President of Amherst College, in Massachusetts. This young preacher you have seen at our house. He is now one of the Presbyterian clergymen in Louisville, and is said to be effecting much good in his congregation. Bishop Griswold and his lady, who have two children residing in Louisville, arrived there last evening. Oppressed by the weight of years, and exhausted by the fatigues of a long journey, the venerable prelate finds himself unable to preach to-day.—I shall leave here to-morrow, for Lexington, the Mammoth Cave, and, perhaps, for;Nashville, Tennessee. I, will remain with his relatives till my return. I shall travel by the public stage.

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LETTER XVI.

The Galt House—Its company multitudinous—Stage—Fruit-trees—Fertility of the soil—Frankfort, a small, quiet city—Its handsome State-House—Residence of Senator Crittenden—Rail-road—Few travellers—Lexington, a charming city—Bishop Smith—Col. Dunham—Green old age—Rev. Mr. D.—Transylvania University—Ashland, the seat of Henry Clay—Woodland pastures—Mr. Clay, a model for farmers, as well as statesmen—His cattle—Late importation of English cows—Difference between slave-holding and non-slave-holding States.

Galt House, Louisville, June 19.

In order to be in readiness for the stage, which leaves at early hour in the morning, I bade adieu, this afternoon, to our friends at the cottage, and came into the city. I have taken lodging, for the night, at the Galt-House—an immense establishment—much larger than Barnum's City Hotel in Baltimore, and quite as well kept. This evening, it is filled with well-dressed people from various foreign countries, and from numerous sections of our own—emigrants, of the better sort, on their way to the more western States—merchant passing from and toward New York—the Tyre of the New World—a multitude of young men sent forth from Philadelphia, Baltimore, New York and Boston, to collect debts, together with

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many foreigners, French, German, English and Irish. Add to these, a goodly number of citizen boarders, and you will be able to form a pretty just notion of the carnivorous and granivorous gentry, by which our supper table was surrounded. The eatables and drinkables before us were good and plentiful, and the attendance of the servants could not be improved.

Frankfort, June 20.

At sun-rising, I took my seat in a comfortable coach, and at 3 P. M., was set down at my present resting place. The distance is about forty miles. The road was not bad, nor was it, by any means, equal to the National Road. The land, most of the way, was quite level, and exceedingly fertile. No one could rationally desire finer fields of wheat and maize than we saw. New as the 127 country is, large fruit orchards are every where visible. the apple pear, peach, and plum tree promise, this season, to yield a bountiful harvest. Almost the only mineral which I noticed, was a grey, or bluish, carbonate of lime, thick set with shells, and vegetable petrifications. We passed through but a single village of any importance, and that was Shelbyville.

Frankfort is more diminutive in size, and a place of less business, than I anticipated finding the capital of the Commonwealth of Kentucky. The streets are noiseless. The sound of the loom and the trip-hammer, and the saw, do not reach my ear. I see no extensive manufacturing establishments—no furnaces or glass-houses pouring forth clouds of smoke. There are few buildings here, which bear marks of their recent erection, and almost none are going up. Half a dozen stores or more, are open, where business, to a moderate extent, appears to be transacting, but *Commerce*, at Frankfort, is, I imagine, rather a quiet dame, and creates less bustle there, than she does in most other towns, of the, magnitude, either in the West, or in the East. Two gentlemen, to whom I had letters, have politely made me acquainted with every thing here, which deserves a stranger's notice.

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The town stands on the Kentucky river, which empties itself into the Ohio, seventy or eighty miles above Louisville, and which is navigated by steamboats, as far up as this city, during three or four months in the year. Its site is pleasant. The elevated grounds, by which it is, on most sides, environed, give to it the aspect of a spacious amphitheatre. The state-house, built entirely of marble, with a front portico, supported by Ionic columns, is a costly and elegant structure. The private dwellings are about as handsome, as the houses are, in the older parts of Baltimore. I saw but once church, which was neat and roomy. There are, I am told, two others. The population is probably about two thousand. Here resides the Hon. John J. Crittenden, one of the talented Senators in Congress from the State of Kentucky.

The rail-road, designed to connect Lexington with Louisville, passes through this city. It is not wholly completed, otherwise, I should, this morning, have taken a place in the car, instead of the 128 stage. That part, however, which lies between Frankfort and Lexington, is finished, and I contemplate using it to-morrow. I wish I could remain here another day, and examine the hills, which border on this city. They contain, I have very little doubt, from their appearance, a number of interesting minerals, of which I should be happy to obtain specimens. This happiness I must forego. Time is always in a hurry, and unless I, too, am moving fast ahead, I shall not be able to accomplish the extensive tour I have marked out myself.

Lexington, June 21.

Unless the number of passengers on this rail-road, when the whole undertaking shall be completed, is more than quadruple what it has been to-day, the stock of the company must, I opine, be even less valuable than that of the Baltimore and Ohio rail-road. There was but a single car—moved by horse power—in which eight individuals were transported. The carriage was passably good—not splendid, like those which pass between Manchester and Liver-pool, or between Providence and Boston, nor could such

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be expected. The amount of income would not justify the expense; but I hope it will, before many years shall have rolled away.

I reached this place about mid-day, and immediately called on the Rev. Bishop Smith, with whom I was, in days gone past, intimately acquainted, and for whom I still cherish a very strong attachment. I found him at home, in the midst of his theological pupils. The building he resides in, is appropriated to the use of the Episcopal Theological Seminary. It is an elegant edifice, and has one of the finest locations to be found in this beautiful city. But the Bishop's exalted station is, I understand from the best authority, no bed of roses—no couch of down—but a pillow of thorns and thistles. He has, unhappily, many bitter and powerful enemies, who persecute him cruelly. Offences are laid to his charge, of a very serious character, and he is, in a short time, to be tried, by a court of bishops, which, is to be held in this city. America will then witness a new thing under the sun. No bishop has ever yet been arraigned, for trial, before a tribunal composed of his peers, in 129 the United States. But a court constituted of such dignitaries will, I am persuaded, give to the accused a speedy and honorable acquittal. I know the Bishop well, and believe him to be a man of ardent piety, and of the purest moral integrity. He may, in the warmth of his good feelings—in his, perhaps, over-heated zeal to promote the happiness, temporal and perpetual, of his fellow men—have been indiscreet; he may have pressed home to the heart admonitions too serious, too solemn, to suit the taste of haughty, pharisaical professors of religion; but, to commit the high offences laid to his charge, he is, I am sure, totally incapable.

You remember Col. J. Dunham, who, twenty years ago, owned and occupied an elegant seat in Windsor, Vt. and who, afterwards, established a female seminary in this place, which earned for itself, and sustained for a long period, a reputation equalled by few similar institutions in the Union. When I was at Bishop Smith's, he heard of my being in town, and called at the hotel to see me. I have, since, been at his house, and dined there. Both he and Mrs. D. exhibited examples of freshness, in advanced years, such as is seldom witnessed. Three score winters and ten have thrown their snows on him—and she

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does not lag a score behind her “lord”—and still they are little less active, and vivacious, and cheerful, than they were thirty years since. We dialogued an hour, on old times, old scenes, and old acquaintances, most of whom have passed into the unseen world. They conducted me through their spacious garden, which is tastefully laid out, and nourishes a number of rare plants, which the frequenters at Flora's court would be delighted to gaze at. Mrs. D. you have not forgotten, is a sister of Professor Hedge, formerly of Harvard University. I was obliged to take a rather abrupt and final leave of these excellent people, in order to go and look at the objects of curiosity in the city, in company with the Rev. Mr. Davidson, to whom I had been introduced by his clerical brother, the Rev. Mr. Humphry of Louisville. His lady is a sister of Mr. Van Doren, one of the proprietors of the Iron Mountains in Missouri.

Fancy could hardly picture a more beautiful location than that of Lexington. The land is not a dead level—a monotonous plain— 17 130 nor is it rough, and precipitous, like the billows of the ocean after a hurricane, but moderately, agreeably uneven. The private houses are, generally, handsome and very many of them expensive and elegant; and so are the churches, and several other public buildings. The most splendid structure, however, which I have yet seen, is that of the Transylvania University. From its summit you have a distinct view of the mansion and domains of Henry Clay—the pride of the West, and the glory of the country.

Lexington is often, in the Atlantic States, styled “the Athens of the West,” but it is, in my apprehension, far less deserving of that honor than Cincinnati. Its University, although incorporated and organized half a century ago, and kept in almost continued operation ever since, accomplishes next to nothing, in the education of young men, except so far as relates to its medical department, which has, at some periods, been very flourishing. Its present number of literary students, I am told, does not exceed thirty. There has, indeed, recently been a rupture among the professors of its medical department, the consequences of which cannot now be foreseen. Some of them have left, in disgust, and are at present at Louisville, attempting the establishment of another school. A new

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organization has taken place in the University. Professor Silliman, as the newspapers have informed you, and several other distinguished scholars, have been invited to the vacant chairs, but have, I understand, declined the honors proffered them.

June 22.

I have, this morning, taken a walk to Ashland, for the purpose of paying my respects to the honorable Senator Clay. I was received with great kindness, and invited to spend the day with him. This I would gladly have done, had I not been previously engaged. Mr. Clay, although one of Nature's noblemen, has nothing, in his deportment, of the aristocrat. He is easy of access, and remarkably urbane and friendly in his manners.

One of the most interesting objects, which meets the traveller's eye in Kentucky, is its pasture lands, in which you see grass, thick and abundant, and which are, notwithstanding, overspread with 131 trees, as large and lofty as those which grow in an ordinary forest I have never beheld such pastures—so fine a combination of woodland and meadow—in any of the other States, or in any other part of the world. I will tell you the mode of making them. The undergrowth is cut away, and grass-seed sown, or, in some cases, hay is scattered over the land, and, in the winter, eaten by the cattle. The seed, without the aid of plough or harrow, takes root, and, springing up, affords delicious nutriment for the numberless cattle, horses, sheep and swine, which live and fatten on it. Here they saunter, sleep, or crop the rich herbage, sheltered from the calorific scorchings of a summer sun, by the dense foliage of the wide-spreading oak, elm, and beech. Mr. Clay owns a noble pasture of this description.

This gentleman, to whom the United States owe a larger debt of gratitude than to any other living individual, is a benefactor, not only of his own State, but of the entire Union, in more significations than one. His career, as a statesman, and as an active politician, has been long, consistent, philanthropic and glorious. His name will stand conspicuous, prominent, sun-lit, on the rolls of history, and his memory be venerated, ages after the

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blood-bought liberties of his beloved country shall have been cloven down, and buried in the oblivious grave, by anarchy or despotism. And yet, it may be questioned whether Mr. Clay, illustrious as has been his political career, has acquired a better reputation for himself, or achieved greater and more lasting benefits for the land of his birth, in his public capacity, than he has in his quiet agricultural pursuits.

It is well known, that he has effected far more for the farmer, by the improvement of his domestic animals, than any other man in America. This he has accomplished, by the introduction into this country of the best specimens of cattle, which could be found in the old world. I spoke of his late importation of cows from England. He immediately requested me to accompany him to the pasture to see them. He first showed me a Durham cow, of the short-horn breed, with a calf by her side. These beautiful animals, recently brought from the "rock-girt isle," were in good heart and seemed quite satisfied with their "transportation." The cow and calf cost 132 Mr. C. \$950. Several other samples of foreign cattle, sheep and hogs, male and female, were pointed out to me, and among them a fine looking cow, which he has lately received, as a present from a nobleman in Scotland.

You recollect the appearance of the asses, which we rode from Puteoli up to Solfatara, when you had a man to lead the doltish animal, and a girl at his stern with a strong stick, to remind him of his duty. The droll exhibition of that day will not, I imagine, soon be forgotten by any who figured in it. I recall it to your mind, merely for the purpose of adding, that I have seen to-day, a number of animals in Mr. Clay's pasture, of the same species, and wearing the same characteristic marks. He has, within a few months, imported these asses from Italy, or from one of the islands of the Mediterranean, for the express object of meliorating, by "amalgamation" of breeds, the Kentucky race of these burden-bearers, thousands and tens of thousands of which are raised in the State, and sent, annually, to supply the demand for the commodity in the more southern portions of the country.

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I returned to the city by a pathway, for the sake of seeing the rich and beautiful groves and gardens of Mr. Clay's son-in-law, Mr. Erwin, the sudden death of whose lady, last winter, clothed her father, the Senator, in the habiliments of deep mourning.

There is, in one particular, a wide difference, every where discernible, and often strikingly manifest, between the white people in the slave-holding and non-slave-holding States; I mean in their habits of industry. In the former, the white population, the men and women—but especially the men—are vastly more indolent, than in the latter. A remarkable illustration of this fact, my own eyes have witnessed in this city, and in Cincinnati. To-day I have observed hundreds of idlers—or men, who seemed such—sitting in the public places, lounging in the bar-rooms of taverns and coffee houses, collected in squads at the corners of streets, lolling on benches in front of the houses, of balancing, Yankee fashion, on two legs of a chair—all apparently at a loss how to get rid of time. At Cincinnati, I am persuaded, I did not see a dozen individuals, who were without occupation. I do not mention this as a reproach to owners of slaves. I have no wish to, censure them. It is, I believe, a legitimate, and perhaps an unavoidable consequence of such a state of things. The slaves are doomed to perform all the menial and toilsome labor, and the whites—not the owners only, but oftentimes their little, indiscreet children, likewise—are, or think themselves, authorized to require it at their hands. The proprietors of the colored race, and their families, are, I am sure, greater sufferers than those held in bondage. I have frequently heard slave-holders express this opinion, and I have no doubt they expressed the truth.

I have taken tea this evening with an agreeable circle of ladies and gentlemen, at the house of a Mr. Todd. Mrs. T. informed me that she was a near relative of Mr. Brown, formerly Minister Plenipotentiary from this Government to the Court of France. I have heard Mr. W. and others in Paris, remark, that no man had ever been sent to France in that capacity, who had sustained a higher reputation among the French, or who was more

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acceptable to his countrymen resident in that capital, than Mr. Brown.—I shall tomorrow continue my journey towards Tennessee, in the public coach.

LETTER XVII.

Face of the country—Kentucky river—Shakers' Ferry—Romantic scenery—Hemp—Harrodsburg—Mineral springs, less attractive than those of Saratoga—Graham's hotel for 700 hundred boarders—Harrodsburg, the first settlement in Kentucky—Stage proprietor—Greensburg—Steatite, its value—Glasgow—beautiful wheat fields—Kentuckians whiskey-makers, but temperate drinkers—Dearness of stage-travelling—Horrible roads—The Three Forks—Bell's tavern—Charming landscape.

Harrodsburg, June 23.

The country over which our vehicle rolled during the four first hours after leaving Lexington, is exceedingly pleasant to the passing eye. The surface is gracefully undulating—the soil, resting on a sub-stratum of limestone, is uncommonly productive, yielding luxuriant fields of wheat, oats, rye, hemp, and maize. The mansions of several of the large planters attracted our attention as we passed. They are capacious and handsome, surrounded by numerous out-buildings; by gardens, filled with ornamental plants and shrubbery; by extensive orchards, and by splendid woodland pastures, animated with countless cattle, sheep, hogs, and horses. The habitations of the lower classes are, in general, but indifferent. They are slightly built, their appearance is shabby, and they are not kept in good repair. An English, or a New England farmer would pronounce them inconvenient and comfortless. They are, however, vastly preferable to the houses, or rather hovels, of the peasants in Ireland, and in the south of France.

The scenery at Shakers' Ferry is romantic, and, in a high degree sublime. Here, the Kentucky river has, at some early epoch, forced its passage through the mighty barrier of solid limestone, which once opposed its progress. The stream, at least one hundred yards in width, pours its angry torrent along, for half a mile—and I know not how much farther—

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between two mural bulwarks, three or four hundred feet in almost perpendicular altitude. This magnificent sluice-way, with walls so smooth, so regular, and so perpendicular, looks much like a work of art. Suppose a huge canal, excavated in solid rock, three or four hundred feet wide, and three hundred deep, half a mile in length, whose bottom is a ragged plane, moderately descending. Suppose a volume of water, a little larger than that of the Connecticut river at Bellows Falls, rushing with resistless impetuosity, fitful and foaming, through this ever-enduring channel. Next, suppose two mountains, or rather two precipices, whose bases are almost in contact with the opposite edges of the canal, rising in frightful steepness to the height of eight hundred or a thousand feet, presenting fronts clothed with Alpine ruggedness, frowning on each other, like two hostile Titans, ready for the deadly encounter. Suppose all this for the outlines, and a good deal for the filling up, and you will be able to sketch a picture of what I have this day witnessed.

You have seen the far-famed Caduta delle Marmore, or Falls of Terni, produced by the little, delightful Velino, which, by three separate leaps, of more than two hundred feet each, precipitates herself, finally, into the embraces of her sister stream, the Nar. The 135 Italian cascade—for it deserves no higher appellation—is a pleasing, charming, picturesque object—it casts a spell around the beholder, which makes him reluctant to turn his back on it—but it has, in my apprehension, nothing of that awful grandeur and sublimity, which are indelibly impressed on the scenery around Shakers' Ferry. There was one circumstance, however, which imparted an interest to the Italian cascade, which I have not observed here. It was the existence of those delicate, net-work formations of calcarious tufa, which were so abundant among the rocks, near the uppermost parts of the falls, and which are occasioned by the deposit, of calcarious matter from the spray, by which those rocks are incessantly lashed.—We crossed the Kentucky river in an ordinary flat-bottom boat, and wound our way up the steep ascent by a circuitous route. The road from the ferry to this place, is badly made, and excessively rough. A better, and a shorter one will, I am happy to learn, soon be constructed.

Nowhere in the Union is hemp raised in so large quantity, as in Kentucky. Many hundreds of acres, covered with this plant, have fallen under my observation, to-day, while moving along the highroad. The article is manufactured into ropes, bagging, &c. and sold to the cotton growers in the Southern States. It is said to have been, in past years, a very lucrative species of business, but is less so at present.

Harrodsburg is celebrated for its mineral waters, and is beginning to be a place of fashionable resort for the pleasure-seekers, and health-seekers of the South, and Southwest. It is certainly less attractive, at present, than Saratoga, or Ballston, in the State of New York. It has not yet their neatness, their elegance of architecture, their broad streets, their magnificent provisions for the supply of the wants of the visitors, both real and imaginary. But Harrodsburg is *now*, what Saratoga *was* thirty years ago, and I do not think it improbable, that in the course of thirty years more, Harrodsburg will become what Saratoga now is. Convenience—comfort—simple, healthful fare—rural recreations—these are sought here, and found, rather than splendid apartments, rich furniture, or sumptuous, useless luxuries.

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Our stage drove directly to the hotel of Doctor Graham, the proprietor of one of the springs, and of the principal public house in the village. I soon betook myself to the healing fountain. Its waters, I found, contain sulphuretted hydrogen, carbonic acid—much less abundant, however, than at the Congress, or Round Rock Spring, of Saratoga—together with the sulphates of soda, lime and magnesia. They send forth a disagreeable odor, and yet the water is not offensive to the taste. I drank two tumblers of it with a good *goût*. Its effect is cathartic. It operates speedily on the bowels, and produces a cleansing, salutary result. There are other springs in the neighborhood, comprising different ingredients, and producing different effects, and which are known by the appellations of *Salt Spring*, *Chalybeate Spring*, and *Vitriol Spring*. —They do things here on a broad scale. The Spring-house, and hotel, in which I am lodged, is sufficiently capacious to accommodate

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seven hundred boarders, and it is, Doctor G. assures me, filled during the watering season, to overflowing. It covers more ground, he remarks, than any other public house in the United States.

Harrodsburg is a small village. It does not, I imagine, contain more than twelve hundred souls. Its situation is not unpleasant, but it exhibits nothing of that neatness and taste in its buildings, its streets, and its gardens, which you are accustomed to see in the villages of New England. It has a court-house, and two churches, the one belonging to the Methodists, and the other to the Presbyterians. It is the oldest settlement in Kentucky. The Fort, in which the famous, fearless, lion-hearted Boon lived, stood but a few rods from the Spring-house. I have just been to examine its site, in company with a gentleman who knows its history, and who related some touching instances of cruelty and suffering, which occurred here in times that "tried men's souls," but which I have no inclination to repeat. This was not the place, however, where the bold pioneer, Boon, chiefly resided. *That* was called, in honor of him, Boonsboro, and is situated on the Kentucky river, at the mouth of Otter Creek, fifteen or twenty miles from Lexington.

I called on the owner of the stage, this evening, to engage a seat in the coach for the next Monday, and there, a new thing occurred. 137 For the first time, since leaving home, I had my bills refused, or rather, pronounced uncurrent. They were Kentucky bills, and acknowledged to be as good as any issued in the State. He demanded eight per cent. discount. I resolved, when I came from home, said I, not to be *shaved* during my absence, except by a *barber*, and if you refuse to take my bills at par, I shall provide myself with some other mode of travelling. "That you cannot do, sir," said he, exultingly. "There is no carriage to be had in the village." And therefore you take advantage of us poor strangers. I will try to hire a horse, or will buy one, and play the equestrian. "That," said the upright stage proprietor, "that you may perhaps, do; but," added he, in a softened tone, "as we have not many travellers in the stage, at this season, I believe I shall give you a passage for Kentucky bills, if you have no other money." I have other money, sir; I have gold, silver, and U. States Bank bills, and happen to have some Kentucky bills. The money of your own

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State is, or ought to be, good enough to pay my expenses in the State, and it is the only money I shall give you. Finding me an obstinate Yankee, and not inclined to be Jewed, he took my bills at par and promised me a seat.

I do not design to flatter any man. Were I to do it, I could. not help despising myself. To commend worth is no flattery. I cannot help saying, that our polite landlord is admirably qualified for the management of this immense establishment. Doctor Graham is a well-informed physician, gentlemanly in his deportment, and exceedingly accommodating to all his boarders. His many kind attentions have brought me under lasting obligations to him. We have taken several long walks together. To-day he made me acquainted with an interesting locality of the sulphate of barytes. It is about two miles south from his house. The substance forms a vein, in secondary limestone rock, which is nearly perpendicular to the horizon, varying in thickness from one to eight inches, and extending, according to Dr. G. at least, twenty miles in length. The mineral is white, and its structure laminated. 18

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Sunday Noon.

I have just returned from Church. The congregation may have amounted to two hundred individuals, one hundred and fifty of whom, at least, were females. I think I never before saw, at church, so large a disproportion in the two sexes. The preacher was the Rev. Dr. Clelland—the minister of the parish—a native born Kentuckian—a man of gray (not white) hairs: he may have seen three-score summers. In the estimation of many, he would not be accounted an orator. He used no notes—he evidently did not speak *memoriter*—he hesitated sometimes—he employed words, or began to do it, and then threw them aside for more significant and pointed ones—he repeated many of his phrases; and notwithstanding all this, I could not help deeming him a most eloquent preacher. He surely accomplished the first object of the orator; he excited and fixed and rivetted the attention of his auditory. The theme of his discourse was the return of the Prodigal son. His heart was warmed, and melted by the subject. His language was tender, pathetic, powerful, burning.

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To the child of sin, he portrayed, in glowing colors, the imminent and awful danger of his condition, and warned, entreated, implored him to escape from the thralldom of sin, and flee, at once, to his heavenly Father's arms, and live forever.

Greensburg, June 26.

I have seen nothing to-day, which you would thank me for describing. There is much good land between this and Harrodsburg, but it appears to be thinly inhabited. We saw no cities. The villages—Perrysville, New Market, and Lebanon—had little in them to fix, and hold, the eye of the traveller. In the vicinity of the last mentioned place, I noticed a good deal of iron ore, which, from the carriage, appeared to be a jaspersy, argillaceous oxide, and similar to that which is abundantly smelted at the Carron Works in Scotland. I observed, near the same place, a mass of steatite, or soap-stone, of a fine quality, which had, probably, been detached from a larger mass, not far off. This, it is well known, is one of the most useful of rocks. It is not likely, that the Kentuckians, in 139 imitation of the Arabians, will ever employ it, instead of soap, for softening their skin in bathing. Nor is it probable, that they will ever follow the example of the Otomages, on the borders of the Oronoco, who, Humboldt assures us, use it for food, and subsist, on it almost entirely during three months in the year. The vegetable kingdom, in these fertile regions, is too bountiful to man, to render it veri-similar, that he will ever be led to employ this mineral to satisfy the cravings of hunger; still, it cannot be uninteresting to him to know, that the same material exists, here, of which his brethren, in the East, manufacture pumps, aqueducts, stoves, caldrons, inkstands, ovens, loom-beams, and a hundred other useful articles.

Glasgow, June 27.

It is mid-day. We are thirty-two miles from Greensburg. The country we have seen is somewhat rough and ridgy. Much of it is in a state of nature, covered with a large growth of oak, maple, beech, elm, dog-wood, ash, locust, white-wood, and birch timber. No pine trees have I yet seen in Kentucky. The cultivated lands are overspread with luxuriant

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crops of grass and grain. The fields of wheat, waving in the breeze, and yellowing for the sickle, reminded me of the elegant wheat fields which we saw, in passing from Nismes to Marseilles, in France. They were as abundant, and as beautiful. The maize grown here, answers multifarious purposes. It is eaten, and esteemed, by the white population—the blacks subsist on it almost exclusively—it is used as food for cattle, horses, and hogs—and nearly all the whiskey manufactured in the State, is made from maize. This last appropriation, you will say, ought, for humanity's sake, to be dispensed with. It is, I know, a perversion, and by the perversion an article is generated, which slays more of our race, annually, than the sword, famine and pestilence. I wish, from the core of my heart, that the deadly demon, alcohol, could be strangled and thrown into the bottomless pit, or that he had never seen the light. In justice, however, to the Kentuckians, I must say, that I believe ardent spirits are less drunken by them, than they are by the inhabitants of some of the Eastern 140 States. At many public houses, they are not sold, nor kept. At the one where we breakfasted this morning—and it has been a tavern for twenty years—no stronger beverage could be had than water, or milk. Indeed, milk seems as common here as water. It is placed on the table, in pitchers, at breakfast, dinner, and supper. The practice is a most commendable one.

I rode alone from Greensburg. Few persons here perform journeys in the stage. There is reason for it. The mass of voyagers are unable, or unwilling, to pay the extravagant price demanded, for the privilege of being jolted over the country in that vehicle. The fare is ten cents a mile—nearly double what it is in Maryland—and this is not all. At the hotels and taverns, the stage passenger is obliged to pay fifty cents for the most ordinary meal. The price for other travellers is precisely half of that sum. The most common mode of journeying here, as well as in Virginia, is on horseback. It is not only the cheapest, and most independent, but the most comfortable, too, for those who are accustomed to this kind of exercise.—The stage drivers, in these quarters, are all white men—steady, sober, and accommodating—or, at least they have been so to me.

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This is Glasgow, but I see no Clyde, no University, no Cathedral. This is a youthful Glasgow, and cannot be expected to equal, in wealth and magnificence, that of *auld* Scotia. It appears, however, to be a flourishing village, and is the seat of justice for Barren county.

I have ten miles farther to travel, to-day, and that not on the stage road. What is your object, you will inquire, in quitting the stage? It is to obtain a view of the Mammoth Cave, one of the greatest physical wonderments on the Western Continent. I go, this evening, to Bell's tavern, at the Three Forks, and hope to have an opportunity, early on the morrow, to gratify my excited curiosity.

Three Forks, Bell's Tavern.

I arrived here just as the monarch of day was beginning to veil his glories in the umbrageous foliage of the western wilderness. I rode hither in a one-horse wagon, without springs, seated in an old straight-back kitchen chair, fastened to the clumsy frame work by cords. The road was horrible—being recently made, not worked at all with the plough, filled a million of the stumps of small trees, cut low down; that is, six or eight inches above the surface, and over which it was quite impossible for the driver to prevent his wheels from passing. You have seen people harrowing in grain, on new and rough land, when the toothed instrument was, every instant, jerked hither and thither, and never moving ahead with a steady pace. So it was with our vehicle. I need not tell you, that in this ten mile jaunt, I have been thoroughly jolted, and pommeled.

I am now seated at my chamber window, feasting my eye in the early twilight, on a charming landscape, which spreads itself out before me. Fields, and orchards, and meadows stretch away, almost to the limits of vision, and the whole are the property of a single individual. The farm is one of the largest, and is to be one of the best cultivated, and most productive in Kentucky. It surpasses, not only in fructuosity, but in extent of surface,

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the domains of most of the English lords. Its owner is a Mr. Bell, who might exclaim, as Cowper makes Selkirk do,

"I am monarch of all I survey, My right there is none to dispute, From the centre all round to the sea, I am lord of the fowl and the brute."

Mr. B. is a very intelligent, obliging inn-keeper, and is well known to all respectable travellers, who, during the last twenty years have visited this part of the State. He has kindly engaged to furnish me with every thing I shall need in the accomplishment of my favorite object. Fatigue and drowsiness press hard on me, and as soon as supper is over, I shall hasten to the place of dreams.

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LETTER XVIII.

Ride on horseback—Guide—Lost in the woods—Turtle-doves—Buzzards—Cave-House and Cave, owned by a Jew—Saltpetre, formerly made here—Entered the Cave at 2 o'clock, P. M.—Penetrated to the "Temple," two miles—Passed the "Narrows," the "First Hoppers," the "Church," the "Well Cave," the "Devil's Looking-glass," 'c.—Extent of the "Temple"—Lateral branches—"Solitary Cave"—"Alexander's Pit, Tecumsch's Grave, Fairy Grotto"—Stalactites, stalagmites, calcareous alabaster—Lamp extinguished—In the Cave six hours—One of Nature's grandest works—Another Cave.

Cave-house, June 28.*

* This letter was first published in the "Christian Statesman," July 13, 1838, with some preliminary remarks by the able editor, the Rev. R. R. Gurley.

Commenced my ride á cheval, at five this morning, with the fixed intention to be here, and breakfast at seven. It is now mid-day. The distance is seven miles—all the way, excepting two or three dots of half-cleared land, with a log cabin or two—through a perfect

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wilderness, composed, chiefly, of the stunted black-jack oaks, starved by the sterility of the soil, over which they are sparsely scattered. The road was nothing but a horse-path, to be kept by means of marked trees. A colored boy, at his master's bidding, accompanied me two miles, and then said, "I'll go back, sir, now; the path is plain; if you look well to the blazed trees, you can't get wrong." *Blazed, blazed*, said I, that is a new word, or rather, a use of it, to which my ears have not been accustomed: what does it mean, boy? "It means *blazed*, sir, I don't know nothing more about it. The trees are blazed, but you must look sharp." Does it mean marked? "Mighty near, sir." He left me, and I moved forward, guideless, two miles farther, and then, perchance, met an old woman, of thick lips and ebony hue, of whom I inquired the way to the Mammoth Cave. "You can't miss it, sir, for a heap of strangers were along here last week." But I did miss it.

There are many cross-paths, and they, too, all have their blazed trees. I took one of them, I know not where, or why, and then another and another, and so have been wandering about, like a lost child, in the lone forest, seven long hours, amidst the stillness of 143 the tomb—or a stillness, broken only now and then, by the sepulchral no living creature, save four or five monstrous buzzards—that rapacious, favored bird—that winged scavenger, which feeds and gormandizes on putrid flesh; and the more putrid and offensive it is to man, the better he likes it.

The Cave-House is one of the commonest, one-story, frame dwellings, much out of repair, and is, at present, occupied by a Mr. Shackelford, who shows the Cave, and resides within a few rods of its entrance. The farm, comprising fourteen hundred acres—on which the mouth of the Cave is found—belongs to an opulent descendant of the patriarch Abraham—a Mr. Gratz, of Philadelphia. He here carried on, (during the late—and may it be the last—war between our country and Great Britain—that unnatural war, of a daughter against her mother,) the manufacture of the nitrate of potash, or saltpetre, and made it a profitable business. No less quantity, I am told, than three or four hundred thousand pounds were produced annually.—Dinner, or rather breakfast, is now prepared. As soon as this important subject has been duly discussed, I shall begin my explorations *sub terra*.

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The young man, who is to be my Cicerone and Mentor, is providing two lamps, one for each of us, a small tin kettle, filled with lard or grease, to feed them with, and several Lucifer matches.

Nine o'clock, A. M.

All things being made ready, we descended, first, on a moderately declivitous plain, and then by a steep flight, of steps, into the dark subterraneous abyss. In the entrance, I saw, in a ruinous condition, pumps, iron kettles, aqueduct pipes, leaching vessels, crystallizing troughs, &c.—the remains of the old saltpetre works. I must tell you, that the nitric acid exists here, principally, in combination with lime, constituting the nitrate of lime. By dissolving this compound, and suffering the solution to pass through wood ashes, by the common mode of leaching, the nitric acid quits the lime, and unites itself with the potash of the ashes, for which it has a stronger affinity, forming nitrate of potash in solution. This, 144 by evaporation and crystallization, is prepared for the market. The operation of making saltpetre has, for a number of years, been suspended—not because the nitrous earth, with which the cave abounds, is exhausted—but because, in these peaceful times, nitre, or the nitrate of potash, bears so diminished a price, that it cannot be lucratively manufactured. This article, you are aware, is an essential ingredient in the composition of gunpowder. It was made here, at a very early period in the settlement of the country, but how early, I do not possess the means of stating. Let me remark, that this huge cavern is, by the handicraft of nature, wrought out, in compact limestone, in which are but few remains, or impressions, of organized substances; or in that species of limestone, which I call oolite, or roestone, and I am not alone in this opinion.

We entered the main cave at 2 o'clock, P. M. and proceeded in it, in a tolerably direct course, *two miles*, to the “Temple,” passing, on our way, the “Narrows,” the “First Hoppers,” the “Church”—where, when the nitre manufacturers were here, there was occasionally preaching—the “Well Cave,” the “Ox Trough,” the “Steamboat,” the “Salts Room”—where Epsom and other salts are crystallized on the walls—the “Devil's Looking-

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glass,” and the “Cataracts,” which are two streams of water, issuing from holes in the ceiling, about as large as a hogshead. After a heavy rain, the noise of the waters, pouring into the abyss below, is heard, at a distance, in a rolling sound, like thunder.

The “Temple,” is an immense apartment, in which you might place all the houses in Pacault Row, and it would not be half full. Its floor was formerly said to comprehend eight superficial acres. Lee, who has examined it, narrows it down to two acres. His estimate, is, it seems to me, too large. The apartment is, however, higher, and more capacious, beyond doubt, than any other subterranean room in our own, or in any other country. In the centre, there is a huge, pyramidal heap of fragmentary rocks, the debris of the lofty vault above. The guide clambered up, and placed his lamp on its pinnacle. From that elevated position, it sent forth its rays, in all directions, illuminating, though dimly, the whole enclosed space, and gave me a passably good impression of its vast magnitude. 145 The wonders of nature! how great! how multiform! how astounding! There are reported to be more than an hundred apartments, of different dimensions, in this overgrown, underground mansion. The Temple is far the most spacious, but you must not understand that it is built in the remotest extremity of the Cave. It is not so. The opening runs more than a quarter of a mile beyond it. But curiosity did not possess power sufficient to impel my worn out *corpus* any farther.

There are branches, innumerable, passing off in all directions, from the main Cave, some of which are more than a mile extent. None of these branches are nameless, but when their were christened, or by whom, I know not. One of them, the “Solitary Cave,” we explored. Its entrance is low. We were obliged, for the distance of five or six yards, to become quadrupeds. That passed, we raised our crouched frames, and stalked along, as men erect, and might have done so, had we been ten feet taller. The ceiling and walls are bleached, and look as if they had, not long since, been whitewashed. Here, too, every object, has its appellation. You see the “Coral Grove Branch,” “Alexander's Pit,” “Robber's Kettle,” “Tecumseh's Grave,” &c. &c.

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We proceeded onward more than half a mile without encountering any thing very remarkable. This brought us to the "Fairy Grotto," a splendid grove of stalactites and stalagmites, of all sizes, shapes, and ages. The sound of the drops of lime water, ever and anon falling on the floor, *splash, splash, splash*, comes to the ear, hollow and solemn, long before you reach the spot. The work goes on briskly, and without cessation, amid the darkness of a double midnight. The light of the lamps exhibits all the steps, in the process of the formations, from the nascent protuberance, swelling and trembling on the ceiling above, and the mammillary bubble, just beginning to rise from below, to the full grown pillar; that is, to the perfect union of the stalactite and stalagmite in the form of a complete cylinder. What is there not in this admirable workshop! Here are superb pillars, fluted and plain, wearing rich entablatures, with, elegant cornices and pedestals, in all the architectural 19 146 orders; alabaster fire-places, of every fashion; urns, and vases, and sarcophagi of snowy delicacy; a range of white, translucent curtains thrown gracefully around a magnificent pulpit; little images resembling pigmies, sitting in marble chairs, or reclining on lily settees, and whatever other imitative forms, the most vivid imagination can drum up. It is idle to write. To *enjoy*, you must yourself see. Many of the tall pillars are half a yard in diameter, and of the purest white calcarious alabaster, capable of being wrought, and which will, I have no doubt, hereafter, be wrought, into candle-sticks, snuff-boxes, vases and numberless other articles. After loading the guide and myself with specimens of the productions of this wonderful grotto, we made our retreat to the main cave.

Here my lamp, in consequence of its oil being exhausted, went out. What, would you do, said I, to my Cicerone, if yours were to be extinguished—could you find your way to the day light? "Nor," he replied, "I would not attempt it, for fear I should break my neck by tumbling over the heaps of rocks, which have come down from the top, or fall into some of the deep holes, which lie along this dark passage. My wisest course would be to remain where I am, until the people of the house, alarmed on account of my long absence, should come to search for me, with a light." Indeed, an imprisonment in this "big dark grave," is a thing which I would by no means covet. It would be more dismal, if possible, than confinement in

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a cell of the Bastille. We were, in fact, in some danger of falling into such a dilemma; for my attendant's last wick was nearly burnt out; the light grew dim, and we were obliged to add new celerity to our weary steps. We reached the outlet at precisely eight in the evening, having passed six hours in our subterranean wandering. The air in the cave is cool and agreeable, but on coming out, and plunging suddenly into the heated atmosphere of the world, I felt, for a few moments, no slight degree of debility and exhaustion.

I have touched only on a few points, and those, perhaps, not the most interesting. To explore, minutely, all its parts, and describe 147 them, would be the work of a month. What shall I say of this wonder of nature, as a whole? I had heard and read descriptions of it, long since, but the half—the quarter—was not told. Its vastness, its lofty arches, its immense reach into the bosom of the solid earth, fill me with astonishment. It is—like Mont Blanc, Chimborazo, and the falls of Niagara—one of God's mightiest works. Shall I compare it with any thing of a similar description, which you have seen on the other side of the Atlantic? With the Grotto of Neptune, or that of Sibyl, at Tivoli, or with any of Virgil's poetic Italian machinery? No comparison can be instituted. I speak, as you are aware, from personal knowledge. You, seated on the opposite bank of the Anio, have seen me clamber up, from the noisy waters below, to the entrance of the far-famed Grotto of Neptune, which I leisurely explored. In point of capaciousness, it has little more to boast than the cellar of a large hotel, and, like that, was, as I think, excavated by human hands. That of the Tiburtine Sibyl, is still more limited in its dimensions. Indeed, every cavern which I have ever seen if placed alongside of this, would dwindle into insignificance. O that we had a Virgil, as superior to the Mantuan bard, as our caves, and rivers, and mountains are superior to those which he has celebrated in immortal song!

I will add, that I was deceived in certain particulars, by the published reports of previous visitors, regarding this mighty excavation. In the first place, its extent, vast as it is, is much less than I had been led to suppose. It has been represented to be fifteen miles in length. This is wide from the truth. The farthest point from the mouth, is a few feet over *two and one fourth miles*, according to the admeasurement of the civil engineer,

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Mr. Edward F. Lee, from whose decision there lies no appeal. From the same authority, I learn, that the united length of all the branches, together with that of the main stock, does not exceed *eight miles*. In the next place, it has been stated, that visitors sometimes traverse the Mammoth Cave on horseback. The thing is utterly impossible. No horse, the guide assures me, was ever in the Cave. It would be difficult to get him in alive, on account of the steepness 148 of the descent, and were he there, travelling on him would be impracticable, except here and there, and that for short distances, in consequence of the huge piles of fallen rocks, which obstruct and bar up the passage against all but pedestrian explorers. It would be far, easier for the horse to mount to the top of St. Peter's, on the gradual flight of stone steps, with which that magnificent edifice is furnished. It is true, that oxen were descended into the Cave, and were worked and kept, within the first half mile from its mouth, during the continuance of the saltpetre operations, but no horses. And, lastly, it has been stated, that the Cave is damp, and unhealthy. In proof of its general dryness, it will be sufficient to remark, that I set on fire pieces of cane, and other vegetable substances, which, it is supposed, have been there four or five centuries at least, and were conveyed thither by the Indians, and the combustion was found to be speedy and vivid. From my own brief experience, I judge, that this underground atmosphere contains nothing of an insalubrious character.—The guide's fee was only one dollar.

Cave-House, June 29.

Mr. Shackelford has this morning conducted me to another cave, a quarter of a mile east of his residence, in which I have seen the most sumptuous display of calcareous formations, generated by the dissolved carbonate of lime, of which you can well conceive. The cave is not capacious, when compared with the one of which I have already spoken; but comprises several good sized rooms, which are completely separated from each other, by snow-white stalactical partitions, down which the water, charged with calcarious matter is constantly trickling. No person, who traverses this region, for the purpose of examining its natural curiosities, should fail to visit this cave. The mineralogist will be able to procure in it finer specimens of stalactitic, and richer samples of stalagmitic alabaster, than are to

be found, even in the Fairy Grotto. My paper is full. You will next hear from me in the land of the Tennesseans.

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LETTER XIX.

Singular depression in the earth's surface, called "Sinks"—"Barrens"—Tyree Springs—Limestone the prevailing rock—Nashville; its conspicuous location—in all respects, the *second* city of the West—Sunday morning—Quietness in the streets—Sunday school children—Rev. Dr. Lindsley—Professor Troost, the celebrated geologist—The weather oppressively hot—General Jackson—Fourth of July, a universal jubilee—Barbacue—Brandance—Nashville, founded on a rock—No cellars, no wells, without blasting—Professor Troost's splendid cabinet of minerals—Wavellite, celestine, gypsum, fluuate of lime—Healthiness of the city—A lover of snakes—Iron mines.

Bell's Tavern.

I found no difficulty in threading my way back to this charming spot. I am now waiting the arrival of the stage, which is to transport me to a more southern latitude. I will employ this unoccupied moment, in saying a few words, in relation to a singular phenomenon, which occurs in these regions, and which I have never encountered in the Atlantic states, nor in any other country—I mean the peculiar depressions in the surface of the earth, in the form of an inverted cone, resembling not only in shape, but also in regularity, the common tin tunnel. These depressions are very frequent in Kentucky. I have seen hundreds of them within the last three days. They vary in diameter, at top, from one to thirty rods, and are sometimes much larger. They are called "sinks" and are supposed to owe their existence to the giving way, and falling in of the roofs of caverns. They are often very deep, and usually hold water, constituting perennial pools, at which the cattle and horses slake their thirst, and of which they are remarkably fond. There is sometimes, low down in the tunnel, an opening into a cave. Running water in the form of brooks and rivulets, is rarely seen

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in these quarters, therefore, those sinks, which serve as reservoirs of water, are to the farmer, and indeed, to all the inhabitants of the country, of incalculable value.

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Nashville, Tennessee, July 1,

Our stage drove up to the Nashville Hotel in the early twilight of the evening. The distance from Bell's tavern, where I finished and mailed my last letter, is eighty-two miles, and I have seldom travelled over a more detestable road. It has been much injured by late rains. A part of the territory between this place and Bell's, is denominated "The Barrens," but it would by no means, be deemed barren, by the New England farmer, who is accustomed to dig, and sweat and thrive, on land far less fertile. It is, indeed, rougher, more broken, and rocky, and less easy of cultivation, than most of the country, which I have seen, on this side of the Alleghanies, and yet it is, here and there, covered with splendid fields of maize, and golden wheat, now falling by the husbandman's sythe and sickle, and adorned with orchards and gardens, and woodland pastures, swarming with domestic animals.

Tennessee abounds in mineral springs. We halted at the dining hour, at the one, which is said to be the most noted, and the most frequented in the State—the Tyree springs, twenty miles from this city. I drank of the water—it was not pleasant to the taste, but would probably become so, by habitual drinking. It is strongly impregnated with sulphur, and yields, plentifully, the odor of sulphuretted hydrogen. There is no village near the springs. The tavern, at which the stage stopped, appeared to be the only boarding-house in the vicinity. That may accommodate one hundred boarders, more than half of which number are already assembled. Among them I saw a few invalids, who resorted thither, no doubt, with the hope of being benefited by the use of the water, but the main object, sought by the major part of the company, was evidently, amusement—the whiling away a month or two of the sultry season—in hunting, fishing, frolicking, drinking and gambling. The water is reported to be efficacious in the removal of diseases of the liver. It might, I am certain, be advantageously applied for the cure of cutaneous complaints.

Fossiliferous limestone, lying in horizontal strata, attends me in all my rambles. The variety of mineral products, existing in this State, is, I imagine, somewhat greater than in Kentucky. I have observed, to-day, on the roadside, jasper, carnelian, hornstone, quartz of several kinds, and argillaceous slate. The last article was noticed on the side of a ravine, and near a murmuring rivulet, about fifteen miles from Nashville. It appeared to form a vein, or layer, of considerable thickness, in gray limestone. Should it be sufficiently abundant, it would be a valuable material for covering the roofs of houses in this city. Some of the enterprising builders will, I trust, cause this locality to be examined.

Sunday Morning.

After breakfast, I sallied forth, to catch my first broad daylight view of the place. Nashville, like many of the cities in the south of France, and more in Italy, stands on a hill, and commands an admirable prospect of the extensive rolling, productive tract of country, by which it is environed. The eye, even of dullness herself wakes up, sparkles, and looks glad, when it reposes on the charming scenery, presented to its gaze—embracing rich fields, and lawns, and beautiful groves, farm-houses and rural cottages, splendid country seats, steamboats, the high bridge, and the sinuosities of the Cumberland river, which skirts the city, on one of its sides, and is about as large here, as the Thames is at London. Rarely have I witnessed so noble a landscape.

With the city itself, as well as with the objects, which surround it, I am well pleased. It is dry, neat, elegant, and its site is about as romantic, as that of the ruined Cortona, or the ancient Corithus, on which you looked, with so much delight, from the plains below. The streets are broad, most of the houses large, commodious, handsomely finished, and many of them furnished with ornamental gardens, and flower yards, the whole exhibiting a freshness, which betokens the thrift and enterprize of the inhabitants. The churches, which are principally situated on a single street, the court-house, banks, and other public buildings are, nearly all, capacious and 152 tasteful structures. Indeed, I cannot help

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pronouncing Nashville to be, in point of situation, and architectural display, the second city of the West. I have seen none, on this side of the monumental city, superior to it, excepting always, Cincinnati.

I have another gratifying fact to relate. It is the good order which is maintained. On this Sabbath day morning, there is no bustle in the streets, no idle, boisterous profane talking—no worshipers of Bacchus, working their way, zig-zag, homeward from the grog shop, and the ale house. Every thing is quiet. No business is transacted. The stores are all closed. Even the pastry and soda water shops are shut. It is true, a few young men, clerks and apprentices, are making their escape, on horseback, and on foot, from the sultry heat and confined air of the city, in quest of enjoyment under the refreshing covert of some country grove, but this practice is not peculiar to Nashville, it prevails in all the Atlantic cities and villages, and often to a much greater extent—even in Boston—than it has here, to-day. It is a practice, however, which I cannot approve, and which ought never to be countenanced, either in the East, or the West. Those men are most likely to be prospered in their secular affairs, who give to Heaven the full quota of time, which Jehovah demands. This was the experience of the good and great Sir Matthew Hale, and it will be the experience of all who follow his example.

I have just witnessed a delightful exhibition—that of a hundred children, or more, of both sexes, clad in clean clothes, with books in their hands, going noiseless, and yet cheerful, to the Sunday schools. These institutions are sacred nurseries where perennial plants are reared and fostered, which, after a short period of training and fruit-bearing here, are transplanted into a more genial soil in the celestial Paradise, there to bloom and flourish forever. Happy is that country, or state, or city, which is supplied with an adequate number of well conducted Sabbath schools! In point of importance to the next generation, and indeed, to the world, both present and future, I regard them as only a single grade inferior to the professed ministrations of the gospel.

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8 O'CLOCK, P. M.

At the proper hour in the morning, I threw myself into the current of people, which moved along the street, and was soon brought to the entrance of a large and respectable looking Presbyterian Church. The services had not commenced. A number of persons were standing before the doors. I entered into conversation with one of them, whose gray locks bespoke him a man of three-score. His demeanor and his words interested me. His heart had been softened and renewed by the power of the Highest. He made many enquiries respecting the condition of the religious institutions in the old States, and rewarded me richly for my answers, by imparting to me a fund of information, regarding matters and things in Nashville.

Shortly, a gentleman, a little below man's ordinary stature, but well made, and of a bright penetrating eye, rode up in his carriage, with his family. "Do you know that man?" asked my new companion. I replied in the negative. "That," said he, "is one of the lights of the West. He has more classical, more theological, and more general knowledge—aye, and more energy and wisdom, too—than any other individual in this region. If every man did his duty, as promptly and as faithfully as he does, we should have better times in our country than we have. He is the president of the University of Nashville, the Rev. Dr. Lindsley. Will you be introduced to him?" Gladly, I replied. I had a slight acquaintance, I remarked, with that gentleman, twenty years ago, but time has, I presume, ere this, blotted me from his recollection. The Rev. Dr. shook my hand with the warmth of an old friend—questioned me about the health of his brother—a physician, and most worthy man, whom I love and respect—resident in the metropolis of the Union—conducted me to his pew, and invited me to spend to-morrow with him, at his house and at the college.

The discourse was pronounced by the pastor of the church, the Rev. Dr. Edgar, who is truly an evangelical and eloquent preacher. His theme was "And the disciples were called Christians first in Antioch." He told us, in glowing and impressive language, 20 154 what traits of character the real Christian possesses, and exhorted, with much fervor of feeling,

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every individual in his auditory to acquire them.—The students of the university occupied seats together, in one of the galleries, in full view of the president, who, occasionally, allowed his keen eye to glance over their ranks. It was pleasing to observe among them no disorder, and none inattentive to the powerful and melting exhortations of the pulpit. Their number, I am informed, is about a hundred and thirty.

Monday, 11 o'clock, P. M.

I have passed a part of this day, and the evening, in the family the Rev. President Lindsley, where I had the pleasure of meeting several of the officers of the college, and among them was the celebrated Dr. Troost, a gentleman, well known on both sides of the Atlantic, as a distinguished naturalist. He is a German by birth, but has long been an adopted citizen of the United States. He holds the chair of chemistry and mineralogy in this university, and is the geologist of the state. At present, he is busily employed in translating from the German, a large and valuable work on fossils.

This is the first day, this season, that I have experienced severe oppression from the heat of the atmosphere. At two P. M. it was intense, almost beyond endurance. A year ago to-day, we were, you remember, in Leghorn, lodgers at Thompson's Locanda di S. Marco, situated on the margin of the Mediterranean, where we inhaled, at our windows, the cool and balmy air, brought to us by a gentle breeze over the surface of the blue waves. The temperature there, was, to me, more supportable, and so it was in all parts of Italy, which we visited, than it has been here to-day.

You must know, that I am only twelve miles from the Hermitage—the villa—the chateau—of the venerable ex-president—but I have, I acknowledge, too little respect for the “Gineral,” to be willing to travel that distance, under the burning rays of a July sun, for the purpose of emptying my small basket of homage at the feet of this “second Washington.” With the “old Roman,” 155 the scale is changed. Fortune, that flattering, fickle goodess, has turned her back on him, forever. Yesterday, he stood on the very pinnacle of mount

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Popularity, one hand resting on the pillar, Power, and the other scattering “loaves and fishes” thick among his liege vassals. Now, he is in the lone valley, the bluff, Scorn, scowling on the one side, and the more dreaded hill—Neglect on the other, with the dark and muddy brook, Lethe, flowing betWeen. His golden days are departed. Power gone, and privilege with it, the weight of his reputation has run down faster than ever did that of an old disordered clock. He has been in this city but twice, or thrice, since he returned from the White House, and then, he received I am told, next to no attention, even from those, who were lately his most devoted supporters. A merchant remarked, in my hearing, that he came into his store to buy a pair of shoes, and offered him, for pay, his choice between an old continental bill, and a shinplaster, observing at the same time “that they were equally good.” At this moment of embarrassment and ruin to thousands, occasioned, as every one knows, by his headlong mismanagement, there are, judging from what I hear in all quarters, few men in our country, who are more generally, and more cordially disliked, than General Jackson.

Fourth of July 1837.

You were awaked this glorious morning, I suppose, by the firing of crackers, the reports of cannon, and the din of drums. The Fourth of July is regarded as a holydy here, and wherever the sun shines on American soil, yes, and in foreign lands, too, wherever Americans enough can be assembled to celebrate the anniversary of their national freedom. Eleven years since, this day was kept as a jubilee, stealthily, by your friend Carter, and a literary companion, on the Palatine Hill, in the very bosom of bigoted Rome, “the cradle and the grave of Roman liberty.” They ate a lunch from “a fragment of a column, which once belonged to the temple of Apollo, and, looking homeward, drank the health of their friends, 156 and the prosperity of their country, in wine, which grew upon the Palatine Mount, amidst the ruins of ancient fanes, and the palaces of the Cæsars.”

How many orators—from beardless youth to wrinkled age—will this occasion call into notice, in the cities and villages and hamlets of New England, where the fire of patriotism,

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kindled at Lexington and Bunker Hill, has not ceased, and, I trust, never will cease to burn. The same patriotism—the same ardent love of liberty—is cherished by the good people of Tennessee, which glows in the bosoms of their fathers and brothers, “towards the rising sun,” but it acts itself out in quite a different manner. No oration is to be pronounced here, but a *Barbecue*, I am told, will be given a few miles out from the city. What, you will ask, is meant by a Barbecue? A Nashvillite, who is now with me, will answer the question.

“The feast is held in the woods, or in the shade of umbrageous trees. A trench is dug in the earth, a rod or two long, two or three feet wide, and as many in depth. The trench is filled with burning charcoal, logs are laid across it, on these is placed, whole, an ox, hog, sheep, or whatever else is to be roasted. The negroes are the cooks. When the meat has undergone sufficient torrefaction, it is transferred, in pieces of suitable size, to tables, rudely made, and is served up to the company with bread, wine, &c. brought from the city. Hilarity is the order of the day. Toasts are drunken, and, occasionally, cannon are discharged.” It is, in fact, much like a Yankee Fourth of July dinner, except that it always takes place *out of doors*.

This, you must understand, is an entertainment for *man*-kind alone—for the *lords* of this terrene ball—the masculine portion, only, of this branch of grandmother Eve's heterogeneous household. There is another, species of amusement and feasting, in which both sexes—the *softer* and the *harder*—participate; it is called a *Brandance*. This, too, is held in the woods, or in a grove. A plat of ground, large enough for the purpose, is smoothed, and then a quantity of bran, or saw-dust, is spread over it to render it 157 more elastic. Several of these Brandances are to take place on the evening of this joyous day.

The Rev. Dr. Lindsley's polite attentions to me I shall always gratefully remember. We have spent much time together, since my arrival in Nashville. This morning, he came to my lodgings, and invited me to take a ride with him in the city, and some of its suburbs. He drove, first, through some of the best built parts of the town, pointing out to me the residences of the most distinguished citizens—the Governor of the State—the United

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States' Senator, the Hon. Felix Grundy—the Representative in Congress, the Hon. John Bell—the Judges, &c. &c. and then passed by the university buildings. Their location is unfortunate. The ground on which they stand is not sufficiently elevated and sightly. He next directed his course to the magnificent State prison, which is being erected, or rather, which is now nearly, or quite, completed. Its massy walls are constructed entirely of hewed blocks of limestone—the common rock of the country. Indeed, the city of Nashville is, literally, founded on a rock—an immense mass of compact carbonate of lime—overspread, in most parts, by a very thin covering of mould, but, here and there, presenting to the eye its surface, naked of all vegetation, and even of vegetable earth. Every place has its inconveniences. This beautiful city is not an exception. A well cannot be sunk—a cellar cannot be excavated—a post cannot be planted—without penetrating into the solid rock. Thousands of years before the Atlantic withdrew its waters into the vast valley which they now occupy, this protuberance was, probably, an island in the billowy waste. It had been formed, at some earlier period in the earth's secret history, when the watery profound was comparatively still, by the gradual deposit of calcareous matter on the living fish and other marine substances, which were then present, and which are now occasionally found embraced in the rock. You have seen chalk precipitate itself quietly from the water in which it was held in suspension. In like manner, as it seems to me, the horizontal strata of carbonate of lime existing here, and in all the regions of the West, were calmly precipitated from the waters of 158 the boundless ocean which once covered this interesting portion of the globe.

I have passed this afternoon and evening at the domicil of Professor Troost. He is a gentleman of highly cultivated intellect, of childlike simplicity of manners—eager to catch knowledge from whatever quarter it may come, and an indefatigable student of nature. Within the territory, which his duty, as geologist of the State, has led him to examine, he has brought to light many mineral and fossil substances, some of which will hereafter prove of immense advantage to the agriculturalist. A number of the fossils, which he has been instrumental in disinterring, are, it is supposed, peculiar to our own continent, and are

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unknown to the naturalists of the old world. A few of the minerals, found by him—chiefly in this neighborhood—and of which he has obligingly furnished me with specimens, I shall here take the liberty to enumerate.

Compact sulphate of barytes, found one mile from Nashville.

Granular gypsum, with selenite, near Nashville.

Neviform, or snow-white sulphate of lime, do.

Anhydrite, partly radiated, do.

Fluate of lime, in distinct octaetric crystals, very large, and almost colorless, Smith county.

Scaly red oxide of iron, Cumberland Mountains, Tenn.

Wavellite, in gray, porous limestone, do.

I have had much satisfaction in looking at specimens in the Professor's superb collection of minerals. It is, beyond contradiction, one of the most extensive and perfect in the United States, and it has been formed, almost exclusively by the personal exertions of its enlightened and persevering owner. I have never seen a collection, which embraced a fuller assemblage of specimens for the happy illustration of the science of crystallography.

Wednesday, July 5.

I have waited two days for the arrival of a steamboat to convey me back to Louisville. The water of the Cumberland is sufficiently high, but the commercial business of the country is so cramped by the deranged state of the currency, that the boats have little—I had almost said nothing—to do. In every considerable port, numbers of them are laid up for the

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season. The Waterloo, a small thing, built for the conveyance of freight, has just made its appearance, but I shall wait still longer, for a more commodious vessel.

I have omitted to inform you, that Nashville is accounted one of the healthiest cities in all the valley of the Mississippi, and, consequently, that it is the favorite resort of multitudes of Southerners, who come hither for the purpose of whiling away, in the proverbially hospitable and refined society of the place, one or two of summer's hottest months. Several agreeable families from Georgia and other meridional States, have already arrived, and occupy apartments at the Nashville Hotel. With some of them I have, so soon, become quite intimately acquainted. You will not be surprised at this, for you know, that well-bred Southerners are far more easy of access, and vastly less formal in their deportment, than the cold-blooded people of the North. This is, I am aware, a general sentiment, and subject to many exceptions.

I was pleased this morning to hear, from the lips of an Alabama gentleman of opulence and education, a warm and eloquent eulogium on my esteemed friend, the Rev. Dr. Church, president of the University of Georgia. He was, in part, trained up under the tuition of that judicious and learned disciplinarian.

Every man has his ruling passion. The gentleman above alluded to, informed me, that *his*—unlike that of every son and daughter of Noah, with whom it has been my lot to converse—is the *love of snakes*. He assured me, that he had, at no time, within the last fourteen years, been without two or three pet snakes, and those, often, of the species which are regarded, by many persons, as the most poisonous and untamable. He believes himself to be as well acquainted with the nature and habits of the serpent family, as any individual in the nation, and he affirms, that most of the essays, which the Americans have written on this subject, within the last twenty years, are almost entirely destitute of truth. He referred 160 particularly to an article, published some time since, in Silliman's Journal, which, he says, is remarkable for nothing, but its errors.

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This city, I need not state to you, is the metropolis of Tennessee, and the seat of its legislation. "The earliest settlement made in it, was in 1779. In 1788, the first superior court of law was held. At that time, Andrew Jackson," late President of the United States, "was State's Attorney pro tem." The population in 1804, was four hundred. It is now about eight thousand. At present, there are four large printing establishments; four book stores, in which nearly all the works published in this country, together with a multitude of foreign productions, ancient and modern, may be found; numerous manufacturing establishments of various kinds; about a dozen clergymen; twenty-five physicians; and more than forty lawyers.—I must remark, that Tennessee possesses more abundant mineral resources than any one of the Western States, except Missouri. Its iron ores are rich, plentiful and extensively worked. It comprehends valuable deposits of sandstone, buhrstone, marble, gypsum, nitrous earths, &c. &c.

Thursday, 10 A. M. July 6.

I am now packed away in the steamboat Gladiator, which is shoving off from the wharf, and destined to the mouth of the Cumberland. I have bidden adieu to my friends in Nashville, where I have experienced unwonted kindness and hospitality. My best wishes are, that the city, on a hill, may have a healthy and rapid growth, and that its inhabitants may ever be prosperous and happy.

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LETTER XX.

Confluence of the Cumberland with the Ohio river—Smithland—Dram shops—Lynch law—Musketoos—Golconda—Shawneetown—Counterfeiters' Cave—Death of two passengers—Rev. Dr. Weller—Description of the river and its bordering lands—Arrive at Louisville.

Smithland, July 7.

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We are again in “Old Kentuck,” having navigated two hundred miles in the last twenty-four hours. I am now seated in my chamber, at McCormick's tavern, where I am enjoying a full view of the two rivers—the Cumberland and the Ohio—far up, my position being directly opposite to the point of their confluence. They are both a good deal swollen by late rains—both covered with logs, roots, and fragments of trees—and both quite distinguishable from each other, for more than a mile, after they come into juxtaposition, by their color. They seem to have no more love for one another, than oil has for water, or a daughter has for her step-mother. The Ohio is heavily charged with earthy matter, journeying from the interior to the ocean, while the waters of the Cumberland are nearly transparent.

Smithland is an inconsiderable, dirty village, whose chief business consists in furnishing supplies for the boats, which traverse these rivers. There are too many dram-shops here to suit the taste of most of the travelling community in these temperance times. It would, I imagine, require the eloquence of a Demosthenes, or a St. Paul, to disperse the worshippers of Bacchus from this their strong-hold. Herculean as the task is, humanity demands its execution.

Opposite to the village, is situated a long island in the Ohio, of three or four hundred acres, called Cumberland island, where *Lynch-law* has been frequently, and sometimes, it is said, *equitably* executed. This mode of administering justice, or rather *injustice*, has, for a number of years, been discontinued. Heaven grant that it may never again be revived! The fair reputation of our Republic 21 162 has been sufficiently disgraced, in the eyes of all civilized nations, by the decisions of the notorious *Judge Lynch*. You remember that we first read an account of one of his acts—the burning of the negro at St. Louis—in a dwarfish hebdomadary newspaper, published in one of the petty sovereignties of Italy. Such articles are sure to find a prominent place in the few vehicles of intelligence, which are permitted to circulate in the despotic governments of Europe.

The last night was the first of the present year in which I have been annoyed by mosquitoes. These buzzing blood-stealers are so multitudinous on, and in the

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neighborhood of these western waters, that nobody expects to be allowed to sleep without the protection of a musquitoe-net I had one around me, but, owing to some unaccountable mishap, one corner of it was left unfastened. About eleven o'clock, in the still hour, the music of the murderous army was heard distinctly, moving around the fortification. The moment the breach in the wall was espied, the assailing host made a desperate and resistless attack, and, carrying everything before them, left their victim mangled and half dead.

When I rose this morning, I found that the steamboat General Brown, a splendid vessel, belonging to Louisville, had just arrived from below, and was letting off her steam. I hastened on board of her, bidding a glad farewell to Smithland, its musketoes, and its whiskey odors, and joined the moving throng. The distance from Smithland to Louisville is three hundred and twenty-one miles. We are now pushing rapidly ahead on the broad, glassy Ohio, which here divides, for a short space, the two States of Kentucky and Illinois. The banks, on the Illinois side, are elevated, and somewhat rocky. We have passed Golconda—not the place where diamonds are found—and are in sight of Shawneetown, on the Illinois shore. The town, as we approach it, seems larger and more important than I had supposed it to be. It stands nine miles below the mouth of the Wabash; is the seat of justice for Gallatin county; has a number of good buildings, and considerable commerce, particularly in salt, having extensive works for the manufacture of this article 163 established in its neighborhood. Our vessel is, at this moment, ploughing the waters, which separate Kentucky from Indiana. She has already shot past Evansville, Troy, and Rome. There is a noted cavern on the Illinois bank of the Ohio, thirty-five miles above Smithland, which is styled—

Counterfeiters' Cave.

I saw its entrance. It is distinctly visible from the boat, and ten or twelve feet above the level of the water in the river. It was, in times gone past, never to revert, inhabited by individuals of the most infamous character: counterfeiters, robbers, and murderers—men

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who committed depredations, often of the most atrocious description, on all who fell within the circle of their malevolent influence, but especially on those unfortunate beings who were, at that early period, engaged in navigating the river in flat-bottom boats, and other slow craft. The cave is now the innocent retreat of bats, owls, and bears.

What is life? "It is even a vapor—a morning cloud"—a gust of wind, that comes and goes. Who can count on another day? Since the General Brown has been on her present voyage, two of her passengers, young and vigorous, and confident that they had many joyous years yet in reserve, suddenly sickened and died. Our party consists of fifty or sixty ladies and gentlemen, brought together from all parts of the Union, and from several foreign kingdoms. They appear, in general, to be genteel, well-educated people. One of the number is the Rev. Dr. Weller, of Nashville, an Episcopal minister, favorably known as a writer, and the founder of a celebrated female academy in that city.

I am, my dear friend, charmed by the beauty of the stream on whose bosom our palace-like boat is bravely working her noisy way, and by the rich scenery which adorns its banks. Would that I could make this scenery appear to you as it does to me! I will give you a picture of it, but not with my own stupifying pen. I shall employ the far more elegant one of my namesake, the Hon. James Hall, of Cincinnati.

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"Heavy forests cover the banks, and limit the prospect. But the woodland is arrayed in a splendor of beauty which renders it the chief object of attraction. Nothing can be more charming than the first appearance of vegetation in the Spring, when the woods are seen rapidly discarding the dark and dusky habiliments of winter, and assuming their vernal robes. The gum-tree is clad in the richest green; the dog-wood and the red-bud are laden with flowers of the purest white and deepest scarlet; the buck-eye bends under the weight of its exuberant blossoms. The oak, the walnut, the sycamore, the beech, the hickory, and the maple, which here tower to a great height, have yielded to the sunbeams, and display their bursting buds and expanding flowers. The tulip-tree waves its long branches and its

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yellow flowers high in the air. The wild rose, the sweet-briar, and the vine shooting into verdure, and clinging to their sturdy neighbors, modestly prefer their claims to admiration, while they afford delightful promise of fruit and fragrance.

“The shores of the Ohio do not anywhere present that savage grandeur which often characterizes our larger streams. No tall cliffs, no bare peaks, no sterile mountains impress a sentiment of dreariness on the mind. The hills are high, but gracefully curved, and everywhere clothed with verdure. Cane-brakes are seen occasionally along the banks. The cane is an evergreen, from twelve to twenty feet in height, which grows chiefly in rich flats. It stands so thick upon the ground, as to form an almost impenetrable thicket. The cane-brake is always a secure retreat for bears, which feed upon the buds, and for deer and other gregarious animals. The inhabitants often drive their cattle to the cane in the autumn, and suffer them to remain, without any further attention, until the ensuing spring. Cattle and horses eat it greedily, and will stray several miles in search of this favorite food, which is said to be very nourishing.

“Cotton-wood”—which is soft and light and grows faster than any other tree in the forest —“peccans, catalpas, and gigantic sycamores are now seen in the rich bottoms. Extensive groves of cotton-wood sometimes clothe the shores of the river. The tree is 165 large and extremely tall; the foliage is of a deep rich green. Nothing can exceed the beauty of these groves: at a distance, a stranger might imagine them forests of Lombardy poplar; and, as that tree is devoted to ornamental purposes, it is scarcely possible to refrain from fancying that some splendid mansion is concealed in the impervious shade, while the deep gloom with which they envelop the soil, gives a wild, pensive, and solemn character to the cotton-tree grove.” I can copy no longer; the city of Louisville is full in view. Our noble vessel, puffing and snorting, is, at this instant, “walking” over the greatest falls in the Ohio, disdaining the confinement of the canal which passes round them. Indeed, these falls, except when the water is depressed below its ordinary height, present very trivial obstruction to the navigation of the river—the whole descent, in two miles, being only twenty-two and an half feet. The water flows with greater rapidity here, than it does in any

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other section of the river, between Pittsburg and the Mississippi, but its surface appears, at the present time, to be very little broken by the rocks below.

Now all is bustle; the passengers are dispersing, never again to meet. I shall go directly to the "Crows' Nest Cottage," where I shall remain, with our friends, two or three days. I shall then resume our old mode of travelling *en petite voiture*, with my companion. The route I contemplate taking, will lead us first to Indianapolis, the capital of Indiana, then to Lafayette, on the Wabash, then through Illinois, by Danville, Decatur, Springfield, (the future seat of the State government,) Jacksonville, and Alton. There I shall have a view of the "Father of Rivers," and be conveyed on it to Galena and Dubuque. After having examined the lead and copper mines in that quarter, I shall move down the Mississippi to St. Louis, and thence travel on horseback, to Herculaneum, Potosi, and the Iron mountain, and back to St. Louis. There I shall take passage in a steamboat for Peoria and Peru, on the Illinois river. From Peru, I shall journey over land, through Ottowa and Juliet, to Chicago, on Lake Michigan. I shall next visit St. Joseph's, Kalamazoo, Marshall, and 166 Detroit, in Michigan. From Detroit, I shall cross Lake Erie, to Cleaveland, in Ohio, and thence proceed, by the shortest course, to the Monumental city, where, Heaven favoring, I shall hope to see you some time in the month of October.

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